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Development of an international written communication audit

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Development of an international written communication audit

by

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ABSTRACT

Although localization, internationalization, and globalization efforts to meet international customers' product and information needs are accepted strategies in the US computer industry, the needs of second language (L2) English speakers are less directly addressed in the international workplace. Application of strategies similar to these three technical communication strategies may benefit international workplace communication.

The international writing approaches represented by these three communication strategies are related to the global management strategies of organizations (e. g., ethnocentric, polycentric, geocentric). This categorization, based on Perlmutter and Hedlund, considers organizations' strategic missions and can be used to align management strategies with international writing approaches and individual rhetorical strategies. For example, an ethnocentric organization, entering the international market from a broad national base, instead of immediately changing its communication approach, might continue to use its source-localized information to communicate internationally. An organization might enter the global arena with an ethnocentric strategy, and, in reaction to emerging problems, focus on localization for each market and rely heavily on translation and translators, becoming more polycentric in its approach. A geocentric organization, balancing between ethnocentric and polycentric management strategies, is in constant communication across national and language borders, and might use both internationalization and globalization approaches in communication. Organizations' global management strategies should align with their international communication practices, both for customers and in the workplace. An organization seeking a larger role in international ventures, yet with ethnocentric, localized communication strategies, might be less successful than one with similar goals and a more geocentric, globalized communication.

In recognition of the diverse needs of organizations and individuals, an assessment method, an International Written Communication Audit (IWCA), is developed in this dissertation. The IWCA, based on linguistic and contrastive rhetoric research, focuses on cultural, pragmatic, and translation issues important to international workplace writing in US-English. The basic IWCA combines internationalization and globalization approaches. A localization module for the PRC is offered as an example of tailoring the audit methodology to the needs of L2 English readers from a specific language group. The construction of a workplace sampling frame and the analysis of the IWCA data are discussed.

CHAPTER ONE—INTRODUCTION

Scenario #1

The executive plane lands on a small airstrip in the Scottish Highlands. A mature, well-dressed European descends with his entourage. They are met by a uniformed chauffeur and taken to a restored castle; each individually furnished room has a color-coordinated Jacuzzi. Dinner at an intimate, expensive restaurant stretches late into the night as the European and his British counterpart discuss business and personal topics, in English and in French, much as they have every time they have met in the last two years. They discuss their companies' plans for long-range collaborations, as has been arranged well in advance. They also discuss their families. Both men are married to women who speak Italian as a first language; the couples use English as the marital language, and their children are trilingual. The scent of expensive, after-dinner cigars makes the trailing, much younger technical assistants cough discreetly, quietly, as they long for the end of this evening in which they are not expected to contribute. They have to be up at dawn to begin the new project and have only one day to work together before all their communication will be done long-distance, by fax and telephone.

Scenario #2

Coming up the street from the subway, young women pour into a restored warehouse in a large U.S. city. The open plan workrooms of the clothing company are divided into chest-high cubicles containing computer terminals and shared work tables. In the pattern-design division, a worker is being reprimanded. "When I was in Turkey, the factory said there was a problem with the description of the model 877 sleeve adjustment you faxed to them. You described the *pouf*-sleeve as 'muffin-shaped.' Turkey does not have muffins!" fumes the supervisor. "But I added a sketch of the sleeve," replies the worker. "Yes, and a good thing. That was an expensive change they were supposed to make. You were lucky they could combine the information and make the change correctly." After the supervisor walks off, the worker asks herself "How was I supposed to know that Turkey doesn't have muffins? Would I know more about Turkish food if I had a college degree? How would I find out something like that?"

The types of international work and the qualifications of international workers have changed dramatically in recent years. At one time, the main international business exchange was negotiation of commerce—developing connections, making a sale, or closing a deal. These negotiations were conducted, typically, by mid- to top-level executives, who had relatively homogeneous training. These executives functioned as commercial "diplomats," engaging in a process similar to political diplomacy.[1] International executives met face to face, like the European executives described in the first scenario, and their work focused on the level of negotiations that accompany high-visibility positions. The control of these communications

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1 Raymond Cohen, *Negotiating Across Cultures: Communication Obstacles in International Diplomacy* (Washington, D.C.: United States Institute of Peace, 1991).

was held securely by a few people whose primary concerns focused on the success of these negotiations. Increasingly, international communication involves post-negotiation exchange, in which organizations exchange intellectual property in addition to physical property. A new generation of workers, with and without second language skills or advanced degrees, communicate with one another, often by telephone, fax, or electronic mail, in pursuit of a shared goal. However, they seldom meet face-to-face. In the situation related to the second scenario, the U.S. and Turkish pattern makers used electronic mail and fax, but typically not the telephone as contact channels; cost, as well as zero overlap of business hours, prohibited telephone exchange.[2]

The proportion of people communicating in the international workplace is now larger, and the individuals involved represent more diverse levels and functions within organizations and are more heterogeneous in their training and experience. Their international work is less focused on negotiating deals and more focused on collaborative and often highly technical actions such as conducting clinical trials, producing data bases, developing CD titles, producing manufacturing specifications, or meeting locally-targeted customers' needs. In these relationships, there is less central control over the content and form of the communications, and the quality of the individual interactions is often unsupervised.

These international communications are influenced by changing technology, technology developed, perhaps, in response to the need to communicate more effectively. Fax transmission, electronic mail, and teleconferences allow people to communicate more quickly, and with greater frequency, across much greater distances. The relative ease and low cost of electronic written and voice communication make linking workers at much lower levels in the organizational hierarchy economically feasible, and place a premium on quick response.[3] As a result of these improving technologies, at the post-negotiations stage workers often speak to and write for people whom they will never meet.

The written work of those involved in international post-negotiation communications, who write as a part of their professional work but who are not necessarily professional writers, is the focus of this dissertation. These writers span an ever-widening range of an organization's personnel; the range of their education, training, and experience levels is also widening, as is the range of their skill levels in writing and reading in their first (L1) and

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2 Organizations committed to the global alliance sometimes shift work-week schedules to a four-day week with long hours to accommodate international contact.

3 Rapid international communication is not new, certainly; as early as the eighteenth century the results of art sales in Italy were reported within a few days to patrons in England. The late twentieth century change is in the number of people able to communicate economically.

second (L2) languages. These skill levels come into play in international communication in a number of ways, not simply between the L1 and the L2 (L1-L2) in language *1*, for in many instances of international communication all participants are communicating in a second language.[4] In this dissertation, the focus is on L1-L2 workplace communication; specifically, on exchanges in which at least one person is communicating in U.S.-English as a first language and all participants are communicating in English.

Admittedly, L2 English speakers vary tremendously in their fluency in oral and written communication, especially those new to the work force. Seventy percent of the companies surveyed in 1990 by the Hong Kong Chamber of Commerce noted that their young workers had problems with both spoken and written English.[5] L2 readers may simply have limited fluency; in a large survey (1001 respondents), Taiwanese high-technology professionals who had over ten years of English language study felt that their English language skills were inadequate in an English as a Language of Wider Communication environment.[6] Highly trained, mature professionals can find English language demands rigorous. Scandinavian psychologists interviewed by Jernudd and Baldauf described their frustration with the language barrier, variously commenting, "It is constantly depressing to be confronted by one's shortcomings in foreign language," or "One year in England/USA—even as a street sweeper—would likely mean more to a scientific career than half a million crowns in the form of a research grant."[7]

Given that L2s recognize problems in their own fluency, it is still unclear, at least in the workplace, how many of their self-perceived shortcomings can be attributed to the L2 readers' level of linguistic competence. Documents are produced in the workplace as working papers under severe time constraints, not intended for customer documentation, and are often conveyed to the next person in a rudimentary state. Working documents can contain errors and ambiguities and are often not "finished."[8] To complicate the picture, the majority of written communication is now sent via electronic mail or fax, methods that underscore the urgency of

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4 The interaction will be $L2_{ac}$-$L2_{bc}$, in which the $L2_a$ speaker has a first language *a* and $L2_b$ speaker has a different first language *b*, and the communication is in still another language *c* which is a second language for all participants.

5 Elaine Winters, "Exactly How Ready for the Workplace?" *Technical Communication* 39.2 (1992): 266.

6 Chia-Jung Tsui, "English Communication Skills Needs of Professionals in Taiwan's High-Technology Industries," *IEEE Transactions on Professional Communication* 34.2 (1991).

7 Jernudd and Baldauf, 1987, 150, quoted in John M. Swales, *Genre Analysis: English in Academic and Research Settings*, The Cambridge Applied Linguistics Ser. (Cambridge: Cambridge UP, 1990) 103.

8 de Beaugrande, Robert, *Text Production: Toward a Science of Composition*, Advances in Discourse Processing, Vol. XI (Norwood: Ablex, 1984).

transmission and imply an urgency for response. The increased use of electronic mail represents increased opportunities for people at many different levels of an organization to communicate rapidly, without revision, generating errors.[9] Although electronic mail users in the U.S. historically have accepted thought fragmentation and misspellings as a by-product of the primitive editing facilities available early in the technology's history,[10] European and Japanese companies adopted electronic mail technology both later and at a higher phase of development than those in the United States. Consequently, electronic mail users in other countries did not learn to tolerate substandard text (e. g., mistyped words, misspellings, sentence fragments, no capitalization) on screen in their own languages, let alone in English, and these errors are more problematic in L1-L2 transactions.[11]

Unlike L1 readers accustomed to reading and processing error-filled electronic mail, L2 readers may not be confident enough to attribute problems to L1 writers when the L2s encounter fragmented text. In addition, L2 readers expect texts produced by L1 writers to be correct, and try to read and interpret L1 English texts as if the texts were accurate.[12] Recognizing errors and interpreting ambiguities takes time for L1 readers as well as L2 readers, of course. However, L2 readers, who tend to have slower reading speeds, smaller vocabularies, less confidence in their reading skills, less ability to recognize textual errors—generally fewer reading skills in their L2 than they have in their L1—face more costly and time-consuming reading pitfalls than do L1 readers.

In addition to time-consuming textual errors, L2 readers can also be confused by cultural context. References to holidays and religious practices and the use of metaphors, puns, and idioms can reflect a writer's lack of cultural understanding. In workplace practice, people find incorporating environmental issues such as differences in holidays or working schedules relatively easy. However, avoiding religious references (consider the U.S.-idiom indicating

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9 Denise E. Murray, "The context of oral and written language: A framework for mode and medium switching," *Language in Society* 17 (1988).

10 Perhaps in response to the international comprehension problems inherent to unformed writing, the business community shows signs of a shift in attitude toward e-mail formality "E-Mail Etiquette starts to take shape for business messaging," *Wall Street Journal* 12 Oct. 1995: A1.

11 Keyboards are different for different languages, and a person using a French keyboard might not be able to recognize common English keyboard mistypings.

12 This seems especially true for Chinese and Japanese L1 readers whose cultures traditionally regard the printed word more seriously than do those of many English L1 readers, or in fact any culture in which political views represented in text may be severely punished. Some of this attitude is reflected in the description of readers being "reader-responsible" in Asian cultures. John Hinds, "Reader Versus Writer Responsibility: A New Typology," *Writing Across Languages: Analysis of L2 Text*, eds. Ulla Connor and Robert Kaplan (Reading: Addison-Wesley, 1987).

strong agreement: "Is the Pope Catholic?") is easier in theory than in practice.[13] Just as sports metaphors have been singled out as problematic in male-female business communication in the U.S., U.S.-sports metaphors can be incomprehensible to L2 readers.[14] Recognizing metaphors and idioms can be difficult in one's native language. Using politeness strategies appropriate for another culture can be even more difficult than recognizing idioms, requiring more knowledge of the target languages and cultures on the part of writers.[15]

Some L1 writers are very successful international communicators, while others need training to recognize problems and to improve their international writing strategies. Organizations need to understand their overall communication abilities relative to their international goals. This understanding comes from effective assessment, addressed briefly in the next section, and from clear articulation of the organization's strategic goals and their relationship to international communication, addressed in Chapter Two.

Assessing International Communication

Because international communication contributes to a firm's success, an organization needs to be able to assess its performance in international communication to ensure that individual actions are aligned with strategic goals, that resources are effectively allocated, and that the organization maintains or increases its ability to compete.

Every organization involved in international communication should have at least some idea of the importance of the international sphere to the organization's strategic goals, discussed in Chapter Two. Organizational activities, including the production of documents, should be aligned with the organization's larger strategic goals, as these goals cannot be fully met if actions and goals are misaligned. Moreover, because goals can change quickly, an organization may need to quickly change its communication tactics. A method for measuring

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13 This phrase represents a category of language use, the rhetorical question used for assertion emphasis, which L2s find confusing and linguists have dubbed the "Pope question." The "Pope question" is also an example of the multiple ways in which language can be confusing in a multilingual setting, representing both an idiomatic usage and a potentially offensive religious reference.

14 Germans and other Europeans do not easily process baseball metaphors (e. g., "he's out in left field," "that's off base"), because baseball is not a commonly played sport in Europe, just as North Americans do not generally understand cricket metaphors. Conversely, the Japanese, who are quite keen on baseball, recognize related metaphors easily. Recognizing and avoiding inappropriate metaphors, puns, and idioms is difficult, for the writer has to be able to recognize these constructions and to create an effective substitute with the intended meaning.

15 In writing, politeness is seen in the presence of politeness markers such as "please" and "thank you", use of formal tone, and close attention paid to titles and status levels of the readers. Incorporating these strategies can improve international communication.

the organization's responsiveness to strategic change should be useful to any organization planning or involved in an international expansion.

Organizations have limited resources, of course, especially resources to improve communication or other services perceived as "soft." International communication training courses "out of the box" can be overly reductive or too basic to help people who already have good international communication skills.[16] It is wasteful to train already competent people. Redundant training takes qualified employees away from meaningful work and implicitly ignores their excellent performance; good employees can become resentful, and doubt management's judgment. A method that identifies an organization's specific problems in international communication, so that training can be designed specifically to address those problems, would be useful to an organization committed to improving its international communication practices.

If an organization is to remain competitive, it needs to understand its performance relative to that of its competition so it can allocate resources to under-performing areas. An organization can benchmark its own international communication performance over time. Benchmarking is conceivably possible across organizations as well, once a baseline for performance is established and comparable references exist. A method to measure organizations' international communication performance could provide such a baseline for benchmarking.

Methods for Evaluating Organizations' International Communication

Because organizations have a number of needs for information about their international communication practices, both oral and written, and in light of the increased dependence on writing in international work, organizations need effective methods for evaluating and improving their international written workplace communication.

One way of evaluating written communication is through usability testing to determine if documents are meeting the needs of their intended audience. However, although usability tests can be well-focused on specific user needs and helpful in developing customer-documentation, they are time-consuming and generally reflect a limited number of readers and writers. Usability testing is an excellent method, however, of uncovering subtle problems in documents, and has a role in finely-focused research in workplace writing as well as in workplace practice.

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16 Stewart Black and Mark Mendenhall, "Cross-Cultural Training Effectiveness: A Review and a Theoretical Framework for Future Research," *Academy of Management Review* 15.1 (1990): 114.

Surveys are a second way of evaluating workplace communications. Self-report surveys of L2 readers involved in an organization's communication are a less workplace-intrusive and less labor-intensive assessment method than usability testing. However, surveys of international communication can be problematic. L2 readers sometimes strongly believe they are responsible for understanding L1 text. Therefore, in their survey responses, L2 readers might not feel justified in complaining or might not be able to pinpoint problematic issues at a fine level of detail, although a well-designed survey could provide useful data. In fact, survey methodologies represent a standard approach for examining an organization's communication processes, and are a major portion of the data collection methodology of a communication audit.

Audits themselves are a third way to evaluate international communication, although conventional communication audits are not designed to address L2 readers' needs. Conventional audits focus on L1-L1 communication behavior and work flow patterns. These audits address relationships within an organization and focus on oral exchanges; on subjective responses to organizational relationships of power and authority, such as perceptions of workplace satisfaction; on general routing of tasks through contact networks; and on counting the frequency of communication.[17] L1-L1 contact is an implicit general assumption in conventional communication audits; the L1-L2 or $L2_a$-$L2_b$ situation is not considered. In fact, L2 issues have often been neglected to avoid offending people and to avoid targeting individuals in audit reports.[18]

Criteria for Developing an Effective International Written Communication Audit

Despite conventional communication audits' drawbacks as effective instruments for evaluating international communication, the communication audit theoretically could be extended to become an effective and practical tool in the international workplace. Conventional audits combine survey methodologies, interviewing techniques, focus groups, ethnography, communication network analyses, content analyses, and statistical analyses as well as critically applied intuition. These basic methodologies are used in linguistic research, such as

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17 Cal W. Downs, *Communication Audits*, Management Applications Ser. (Glenview: Scott, Foresman, 1988).

Annette N. Shelby and N. Lamar Reinsch, Jr., "The Communication Audit: A Framework for Teaching Management Communication," *Business Communication Quarterly* 59.2 (1996).

18 Seymour Hamilton, *A Communication Audit Handbook: Helping Organizations Communicate* (New York: Longman, 1987).

sociolinguistics, as well as in business applications. Not included in conventional audits, however, are usability testing and close textual analysis, techniques also used in linguistic and workplace research. The audit methodology could be extended to incorporate international communication issues, then, based on linguistic and workplace research, to include close analysis of international written communication. I see such close analysis as critical to an effective international communication audit because a large portion of international workplace communication takes place in writing. Therefore, an international workplace communication audit (IWCA) must focus on textual issues.

An effective IWCA will meet several criteria. First, at the macro level, an IWCA must yield data that will help an organization to align individuals' actions with the organization's strategic goals as well as effectively allocate the organization's resources to meet those goals to maintain or increase competitiveness. To achieve these higher-level objectives, the IWCA must be capable of performing both diagnostic and evaluative functions. That is, an organization could use an IWCA to diagnose its international communication practices or to evaluate training or organizational changes by benchmarking its performance against internal or external standards. These two functions, diagnostic and evaluative, are necessary for organizations to meet their multiple needs to focus their strategic direction and communication and to contain costs while maintaining or improving their market share. To perform these functions, the IWCA must meet three additional criteria: it must reflect L2 readers' needs, present a comprehensive picture of an organization's international project divisions, and adjust to an organization's needs. These criteria, interwoven into the design of the IWCA instrument and the strategies for data selection and analysis design, are discussed below.

Diagnoses communication practices and evaluating performance

The IWCA must be capable of *diagnosing* whether alignment exists between an organization's international communication strategies and its mission and strategic direction. Organizations have many entry points into international markets, and many possibilities for the focus of their strategic directions. Generally, an organization concentrated in a national market might take an ethnocentric or locally-focused strategic direction, which will be reflected in its communication strategies. An organization with a number of markets in different countries might be more polycentric in its approach to international communication, and will depend more on localization strategies. An organization attempting to gain or maintain a global presence might take a more geocentric attitude in all of its communication to match its international strategic position, and will be actively internationalizing or globalizing its communication. Chapter Two discusses these strategic positions (ethnocentric, polycentric,

and geocentric) and associated communication strategies (localization, internationalization, and globalization).

The IWCA must also be capable of *evaluating* the organization's action plans—that is, measuring and assessing the results of training employees, restructuring a division, or adding new personnel. If an organization decides, on the basis of an IWCA, to train people in international writing strategies, the results of the training can be evaluated by a second post-training IWCA. The results of this re-audit could serve two functions: evaluation of the success of the training method, and feedback to those taking the training. Evaluation of the training could be especially useful if the organization were testing a pilot training program before wider application. Feedback to participants would be important reinforcement for any training effort. Division restructuring and the addition of new personnel could also affect international communication, and a pre- and post-audit would provide information about the effect of such changes in the organization.

By comparing earlier and subsequent audits, then, an organization could measure internally the results of its training or its progress in meeting some goal.[19] Organizations could also gauge their performance relative to external measures or benchmarks to determine the need for change or the direction of change required. For example, an organization could use the performance of the top organization in its field as the standard by which to compare its own performance, or it could choose to measure its performance against that of its closest competitors.

Reflects L2 readers' needs

Traditionally, international communicators and ESL instructors have focused on improving the L2's ability to read and write English. However, because second language learning is time-consuming and expensive, it could be ineffective for U.S. or British joint-venture partners to focus on the linguistic shortcomings of their L2 global partners when written communication from the English L1s could be more easily and cost effectively improved. Essentially, given the broad knowledge base many L1 writers have about their first language, improving L1 writing for an L2 audience might be a more cost-effective way of improving L2 reading.

The effectiveness of this strategy depends on knowing what would improve L1 writing in L1-L2 communication and being able to determine the extent to which L1 writing meets L2 needs. Therefore, an IWCA must reflect L2 audiences' needs. Certainly L2 audiences vary

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19 William J. Martin, *The Global Information Society* (Brookfield: Aslib/Gower, 1995).

tremendously in their needs, both within a given language, such as Chinese or German, and across many languages and language families. These L2 needs have been addressed to some degree in the efforts of organizations in localization, internationalization, and globalization of products and customer documentation, especially in the computer industry.[20]

L2 readers' needs are categorized into three main areas: translation and readability issues; message pragmatics; and cultural understanding issues.[21] These three areas are not mutually exclusive, and can, like texts, be interpreted in a number of ways. However, attention to these three areas can improve writing for L2 readers by decreasing their number of questions about a text and reducing the time required for them to process text. Since many L2 readers translate as they read, translation and readability issues, discussed in Chapter Three, are important in any discussion of L2 readers' needs and play a major role in the construction of the IWCA questions.

Message pragmatics includes politeness and various strategies of indicating respect and formal attention. Politeness, of course, can also be considered a cultural issue, indicating one instance of the blurring of these three descriptive categories. People vary individually and culturally in their ideas of what constitutes politeness, like a polite salutation or telephone introduction, and in their desire to be recognized as individuals or representatives of their organization. Recognizing and acknowledging the situations in which some form of politeness might be expected and responding to that situation appropriately is part of recognizing the expectations that affect how people interact. Therefore, an effective IWCA must recognize the presence or absence of pragmatic strategies, such as politeness, and other cultural issues. A well-designed IWCA would go beyond conventional communication audits to analyze documents closely for critical features as an indication of the localization, internationalization, and globalization strategies used consciously or unconsciously by writers as described in Chapter Three and Appendix 5.

Presents a comprehensive picture of an organization's project divisions

The IWCA, outlined at the instrument level in Chapter Four, is a multilevel construction, reflecting information gathered about the organization and its divisions,

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20 Sandra Martin O'Donnell, *Programming for the World: A Guide to Internationalization.* (Englewood Cliffs: PTR Prentice Hall, 1994).

Nancy L. Hoft, *International Technical Communication: How to Export Information About High Technology*, Wiley Technical Communication Library (New York: John Wiley, 1995).

21 There are other categories possible; these three areas represent a "chunking" of the literature, described further in Chapter Three.

departments, individuals, and documents. The purpose of an audit is to provide data that can be accurately generalized to represent the larger organization. The generalization can be document-focused, and the results of the audit assumed to represent a general picture of the documents produced throughout the organization. The generalization can be division- or group-focused, and represent the general performance of the different divisions. Providing data that can be generalized, however, requires a sampling strategy that samples enough documents to provide reliable estimates and yet not does over-sample or sample intrusively. A comprehensive yet flexible sampling plan, therefore, is part of a well-designed IWCA. A compatible analysis strategy is necessary for the analysis and reporting of collected data. Therefore, two critical steps in the IWCA development are to develop a sampling strategy, as described in Chapter Five, and a data analysis strategy, as discussed in Chapter Six.

To be comprehensive, an audit must address four key "levels" of a firm: organization; divisions, departments, and other smaller groups within the organization; individuals; and the documents they compose. In the first three levels, the informants are people, who operate from recall, by best guess, or by citing official or unofficial statistics, none of which may serve to answer the auditors' questions completely. At the fourth level, the informant is the document; the auditor, following a plan to the best of abilities, generates responses at this level based on interpreting the document. The four levels and the overriding focus of the auditor's questions at each level are shown in Table 1.1.

Table 1.1. Key Organizational Levels and Audit Focus

Level	Focus of Questions
Organization	to determine strategic direction
Group	to determine long-term goals
Individual	to determine short-term goals
Document	to determine the presence or absence of L2-relevant features

All key levels must be measurable or estimable, to allow the creation of a sampling frame that will adequately reflect the organization or the part of the organization under scrutiny, before the audit data can be generalized. The creation of the sampling frame is governed not only by statistical but also by logistical issues, which will differ by organization. Chapter Five discusses a sampling strategy that considers the advantages and disadvantages of statistical sampling and the mechanics of sampling and data collection.

Once collected, the data must be analyzed and reported. Chapter Six describes an analysis plan based on three issues involved in completing and reporting an IWCA: the goals of analysis, the mechanics and logistics of analysis, and reporting strategies for the analyzed data. One issue in designing the analysis plan is how to handle subjective response data. At all levels, the audit information is subjective to some extent, open to errors of omission and commission. Chapters Five and Six discuss errors in measurement and recall, and how these errors will affect the generalizability of collected information. Attention to these statistical and logistical issues is necessary in any well-designed audit. The basic concepts of the conventional communication audit are replicated and extended in the design of this IWCA to capitalize on existing research.

Part of extending the IWCA is focusing on the specific organization. In each organization, and within different sections of the same organization, there will be different answers to questions related to the production and flow of international documents. What is production? What counts as international? How should a document's progress be tracked? How should information (context) about a document be retrieved? Detailed answers to these questions and others like them will be unique to each organization, and the IWCA, like any audit, will need adjustment from one organization to the next to accurately and comprehensively reflect the organization's performance. The IWCA goes beyond conventional communication audits to analyze documents closely for critical features as an indication of the localization, internationalization, and globalization strategies used consciously or unconsciously by writers.

Adjusts to an organization's specific needs

Since organizations have different levels of need, a well-designed audit plan can be adjusted to the individual organization. Adjustment refers to the ability to use the audit to target key divisions and L2 needs, and reflects the sampling strategy used, the level of localization of the audit to the organization's specific L2 audience, and the ability to contain the costs of the audit in proportion to the expected benefit of the information obtained. These adjustment issues represent judgments made by the auditor and the organization as well as specific design elements of the IWCA.

Sampling Strategies

The projected use of the data will make a difference in the depth of audit chosen. A large organization for which international communication has great importance can more easily justify and bear audit costs than a small organization or one with limited global market share.

Focus of use will dictate the level of effort, which influences sampling strategy, discussed in Chapter Five. The projected use of the data drives the costs to some degree: the more important international communication is to an organization, the more precise a picture of its communication the organization may need to obtain. Estimating the situation with a high degree of accuracy, which can be very costly, may be necessary or sensible for only a few organizations or for joint ventures with high stakes in the international marketplace. A less intensive or more tightly contained effort might be appropriate for an organization with a small international workforce or low market share goals, as discussed briefly in Chapter Two.

Localization

Focusing on the needs of speakers of specific languages is a method of localizing the IWCA. Localization depends on the number of language groups or nations with which an organization interacts. Appendix 5 discusses the localization of workplace writing in U.S.-English for Chinese L1 speakers, following Nancy Hoft's suggested seven-factor outline for investigating local and international variables.[22] Chinese is examined as a localization language for two primary reasons: Chinese L1 speakers are one of the largest linguistic groups in the world, with over 1.2 billion Chinese speakers in the PRC alone, and relatively little Pacific Rim workplace research to date has concentrated on the needs of Chinese L1 speakers as opposed to Japanese or Korean L1 speakers. Of course, within this huge group of Chinese speakers, there are great cultural and linguistic differences, across geography, politics, and generation of speaker, differences that serve to underscore the need to focus on workplace communication issues for L2 readers.

Cost Containment

Audit costs and level of accuracy will vary depending on the number of people and documents employed, interviewed, and closely analyzed. These numbers influence the reliability of the IWCA estimates. Reliability of the IWCA is critical when an organization plans to use the audit results to make policy changes or intervention decisions, such as training or employee retention, as a direct or indirect result of the audit evaluation.

Implications of an IWCA in the Workplace

Although Chapter Seven details the expected short and longer term benefits as well as the possible liabilities of the IWCA, some of those benefits and liabilities should be mentioned here, as part of the framework in which to consider the IWCA.

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22 Hoft, *International Technical Communication: How to Export Information About High Technology* 60-62.

Benefits

The IWCA is expected to facilitate training by assessing the strengths and weaknesses of an organization. With accurate assessment, organizations can avoid redundant or inadequate training and its attendant costs. The immediate or short-term benefits of the prototype IWCA to an organization include increasing workers' awareness of international communication through the assessment process and the organization-wide feedback. The longer term benefits of a more fully developed IWCA include focused training, benchmarking, and assessment of strategic alignment throughout the organization.

Liabilities

With any audit, two main liabilities are possible. The first liability is the audit being misused. The second liability is the audit itself being invalid. Erroneous action can result from misuse of audit results or from an invalid audit. Both situations would be costly to the organization. The worst case scenario is unjustified layoffs based on the outcome of the IWCA, a possibility that must be addressed.

In response to the first issue, misuse, the auditor and the organization need to work together throughout the implementation of the IWCA to ensure that the organization understands the strengths and weaknesses of the audit. This education process continues throughout data collection and culminates in the presentation of the final report. Within any audit design and analysis, strategies exist to shield the identity of individuals while still presenting a balanced and useful view of the workplace communication. These strategies are implemented in this IWCA plan to avoid exposing individuals to inappropriate risk.

In response to the second issue, validity, the prototype IWCA described in this dissertation must be tested thoroughly in both laboratory and workplace settings before being offered as a decision-making tool to an organization. There are a number of methods to determine the IWCA's validity to measure writing relative to the needs of L2 readers. The validity of the IWCA instrument, and its reliability in measuring how effectively the selected documents represent an organization's global mission in action should be examined in future research projects.

Understanding the organization's global mission requires examining the organization's global management strategies. In the next chapter, I present a categorization of four global management strategies and their relationship to international communication strategies.

CHAPTER TWO—ORGANIZATIONAL STRATEGIES IN INTERNATIONAL COMMUNICATION AND THEIR ALIGNMENT WITH INDIVIDUAL RHETORICAL ACTIONS

> Organizations may have senior managers sending their strategic visions down the hierarchy, while below creative people may be sending strategic initiatives back up. Effective organizations seem to do both, but that raises a major problem in the strategy process: . . . How to reconcile the two opposing pressures?[1]

As responsibilities for international communication spread throughout organizations, control of international communication shifts from being centered in a small group of mid- to high-level executives to being diffused among many individuals in many divisions and departments. With this shift in locus of control, an organization's international communication is more difficult to align with its global strategy. As a result, organizations increasingly need to be able to assess their international communication to ensure that individuals' rhetorical actions are aligned with the organization's global strategy.

An IWCA can be used to assess this alignment. One of the possible outcomes of an IWCA, as noted in Chapter One, is recommendations for effectively allocating resources to training to improve communication so that it can become aligned with the organization's global strategic mission.

As shown in Figure 2.1, in a completely aligned organization each of the four levels illustrated *supports* every other level. That is, for example, the global mission (the end to be achieved) helps an organization to determine its global strategies (the means to achieve that end). The global mission and strategies, in turn, help an organization to determine its international writing approaches; and all three levels help an organization's individual writers to determine their rhetorical strategies. The same works in reverse. Individuals' rhetorical strategies support an organization's international writing approaches, which support the global strategies, which help achieve the global mission. Although *support* is bi-directional, *influence* is not; except in one instance, influence is always topdown. The global management strategies (at the second level) influence the kinds of writing approaches that can be taken; and the organization's writing approaches (explicit or tacit) influence individuals' rhetorical strategies. Only at the two top levels is influence reciprocal, since the effectiveness and success of an

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1 Henry Mintzberg and James Brian Quinn, *The Strategy Process: Concepts, Contexts, Cases*, 2nd ed. (Englewood Cliffs: Prentice Hall, 1991) 96.

organization's global management strategies will affect how an organization achieves or even reconceptualizes its global strategic mission. In summary, the individual international writer addressed by the IWCA has the power to support but not to formally change the strategic direction of the organization.

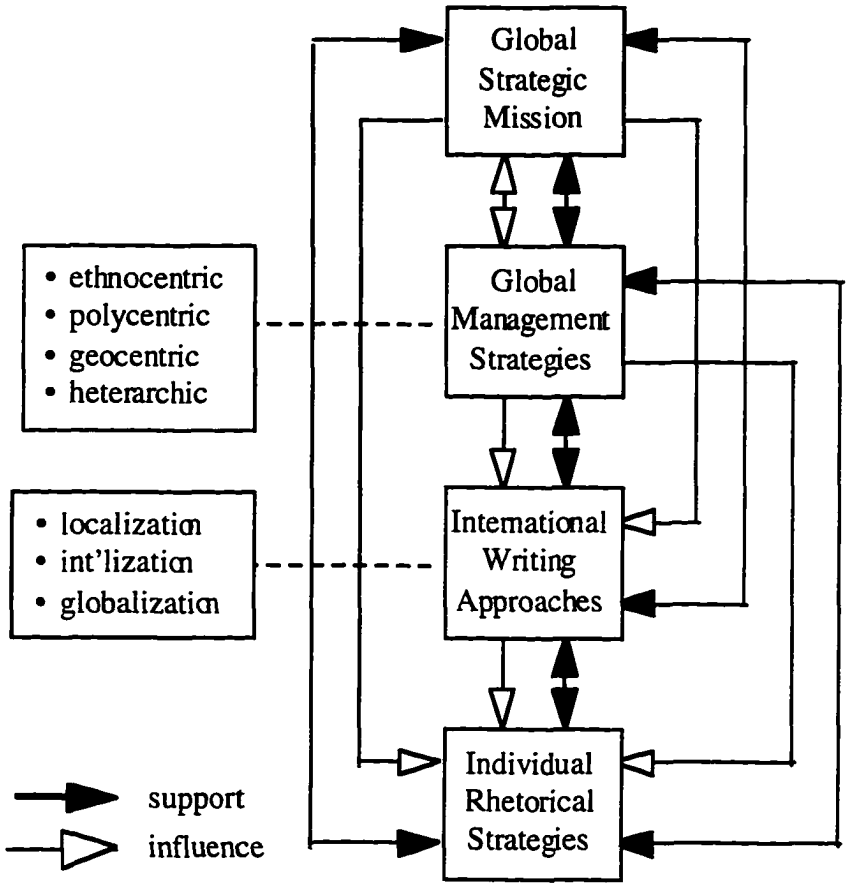

Figure 2.1. Directions of Influence and Support in Communication and Management Strategies

When alignment does exist between an organization's mission and strategies, then intervention (i. e., training in writing) would be indicated, assuming that misalignment exists between or among individuals' rhetorical strategies, international writing approaches, and global management strategies. The remainder of this chapter discusses three international writing approaches used by organizations and four global management strategies that those

approaches can support. The following chapter discusses individuals' rhetorical choices in international or cross-cultural settings.

Global Management Strategies Shaping Communication Strategies

To achieve their global mission, organizations use global management strategies which can be described as ethnocentric, polycentric, geocentric, and a special case of geocentric strategy, hypermodern or heterarchic.[2] Management strategies or perspectives, according to Robert Maddox, can shape the international communication strategies employed by members of the organization.[3]

These four global management strategies describe organizations that engage in any form of international business. In turn, they are supported or maintained by one or more of three major international writing approaches: localization, internationalization, and globalization.[4] These approaches represent organizations' formal responses to customer needs for linguistically tailored information, and are frequently used in the computer industry.

Localization is the most familiar strategy, for localization represents the national (source) or local strategy, in which information is designed for a particular culture or language group. In the United States, documentation produced only for U.S. consumers is localized to the U.S.; the U.S. is the source-country for the information.

Internationalization is the adaptation of source-country information for an international market by separating "universal" from culturally determined variables. In this approach, both the base (global) and the cultural (local) variables of the product and information are identified before the product and documentation are adapted for an international market.[5] For example,

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2 Gunnar Hedlund, "The Hypermodern MNC—A Heterarchy?" *Human Resource Management* 25.1 (1986). This terminology was first put forth in 1965 in the corporate arena by H. V. Perlmutter and elaborated in 1986 by Hedlund. The term "ethnocentric" has been used in philosophy and anthropology. The application of the terms "hypermodern" and "heterarchy" represents Hedlund's contribution; "hypermodern" was coined by Aron Nimzowitsch to describe a daring chess move and "heterarchy" is a term used by in 1977 by Ogilvy of Stanford Research Institute to "describe a shift in of perspective in a wide range of sciences" (Hedlund, 9).

3 Robert C Maddox, *Cross-Cultural Problems in International Business: The Role of the Cultural Integration Function* (Westport: Quorum Books, 1993) 61.

4 Nancy L. Hoft, *International Technical Communication: How to Export Information About High Technology, Wiley* Technical Communication Library (New York: John Wiley, 1995).

5 U.S.-source documentation for an electrical product might be adapted for an international market by determining the power requirements of the different markets, separating these descriptions from the base product instructions, and combining the diverse power requirements into a multi-lingual, fold-out page integrated into the global information packet. In this case, then, there are base instructions that apply to all users and some local instructions that apply only to some users in specific locations.

operator manuals produced by the John Deere Corporation are illustrated, regardless of target culture, with the same "flatman" drawings as a global variable, while the text, a local variable, is written in different languages.[6]

Globalization is a strategy intended to streamline distribution in a number of countries. Globalized products can be used in different cultures and globalized documentation is designed from the beginning for a wide range of linguistic contexts.[7] An example of a recent globalized product is the Macintosh computer, with its "smart" internal power adaptation that requires no user-interaction (other than an appropriate local socket computer cord) to adapt to European power sources.[8]

To date, these three writing approaches have been applied more often to customer information than to internal workplace information. However, international workers have many, if not all, of the same information needs as international customers, and can also benefit from communication written to meet their needs. Therefore, application of international customer-focused communication strategies to workplace writing should make workplace communication more efficient. The choice of strategy depends on the number of nations and languages involved in a given communication, and the global strategic mission of the organization. Table 2.1 indicates the international writing approaches logically associated with the four global management strategies.

The following sections outline the four global management strategies and the writing approaches that most often support them. In addition to describing these global management strategies, I also suggest which of the four are more supportive of intervention aimed at improving international communication.

Ethnocentric

A traditional strategy is ethnocentrism, which reflects the belief that "what worked at home will work abroad."[9] Typically, an ethnocentric international organization has moved

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6 Charles Kostelnick, "Cultural Adaptation and Information Design: Two Contrasting Views," *IEEE Transactions on Professional Communication* 38 (1995).

7 Hoft, *International Technical Communication: How to Export Information About High Technology.*

8 This was not true in India, apparently, because of power fluctuations. The desktop metaphor of the Mac also worked for many European computer users, although the product did not become widely used because the pricing was prohibitive for many users.

9 Maddox, *Cross-Cultural Problems in International Business: The Role of the Cultural Integration Function* 53.

slowly into international business from a large, successful, national base, and its international involvement is seen as an extension of its home territory. International work is undertaken much as domestic efforts would be, with the assumption that what was successful in one country will be successful in another.

Table 2.1. International Writing Approaches Associated With Global Management Strategies

Global Management Strategy	International Writing Approach		
	Localization target-specific	**Internationalization** multinational	**Globalization** universal
Ethnocentric target-specific	✔	limited	limited
Polycentric multinational	✔	✔	limited
Geocentric international	limited	✔	✔
Heterarchic balanced target, international & multinational	✔	✔	✔

The ethnocentric management strategy, as described by John Daniels and Lee Radebaugh, has three major variations. In one variation, management does not know much about the other country, and bases its decisions on current local experience. In a second variation of ethnocentric strategy, management recognizes differences in culture, and believes that changes must be made—but the goal of the changes is to ensure that the international branches more closely resemble the home office. In this second variation of the ethnocentric strategy, management may further believe that these changes can be easily made. In the third type of ethnocentric strategy, management realizes both that environmental differences exist and that change is difficult. In recognition of these challenges, instead of pursuing a global

share of the market, they pursue a high national product penetration in search of high national market share even though a global strategy might be even more profitable.[10]

Any of these three ethnocentric positions—limited international knowledge, imposition of standards reflecting the home country conditions, and concentration on domestic objectives—can cause problems for an organization. The first two positions—limited international knowledge and belief in home-country standardization—are more likely to affect business adversely, as seen in the case of Tyco Toys described below. The third position, concentration on domestic objectives, can cause an otherwise successful organization to miss international opportunities.

Traditionally, more U.S. firms have operated from an ethnocentric perspective in staffing their international operations than have Japanese or European firms.[11] Examples pointing to a U.S. ethnocentric perspective range from the high number of management staff that U.S. firms send overseas to supervise foreign operations to major marketing blunders, such as the large left-hand drive American car produced for export to Japan and England, where the standard car is right-hand drive and sized to maneuver narrow streets. A U.S.-based corporation in which American English is used in all product announcements and internal documents regardless of the ultimate point-of-use might be described as ethnocentric or narrowly localized. Staff in an ethnocentric firm might spend little time editing or revising their work for international colleagues, and might refer to the international alliance partners and associates as "foreign firms" and "foreigners."[12]

Ethnocentric corporations tend to invest little effort in their international communication until after they have moved into a larger arena and discovered problems. Tyco Toys, a U.S. toy firm, went from being well-positioned to selling off the majority of its non-U.S. subsidiaries in three years because of an ethnocentric strategy. Tyco Toys entered the international market with limited international experience. Tyco Toys expected to use U.S.-marketing techniques in other countries, and unsuccessfully approached the Italian toy market from this perspective. The Tyco Toys CEO did not accept suggestions that the organization adapt to local customs (e. g., targeting toys to British TV figures for sale in Britain) or distribution needs (e. g., small deliveries for small European stores).[13]

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10 John D. Daniels and Lee H. Radebaugh. *International Business*, 5th ed. (Reading: Addison-Wesley, 1989).

11 James C. Leontiades, *Multinational Corporate Strategy: Planning for World Markets* (Lexington: Lexington Books, 1985) 52-53.

12 This reference does not need to be pejorative or condescending in tone to qualify as ethnocentric.

13 Joann S. Lublin, "Too Much, Too Fast," *The Wall Street Journal* 26 Sep. 1996: R10.

Prior to entry into a new market, organizations examine their product literature and other customer documentation and consider the need for localization, internationalization, or globalization of written products in addition to their physical products. A strongly ethnocentric organization might not make changes to written materials if its initial international entry was very small or if it assumed market conditions did not demand adaptation. Changes to this ethnocentric strategy would be considered if expansion into the new markets fell below projected levels or market share was lost to competitors who were following a different course of action. However, an organization doing well with its nationally-based style may not need to change, especially if its product is competitive in the global market. Conversely, an organization such as Tyco Toys, making a major bid for global presence, may fail with an ethnocentric strategy.

A business will generally emerge into the international field, according to Hedlund, with an ethnocentric strategy.[14] Depending on the success of the ethnocentric strategy in a larger arena, organizations may or may not adapt their strategies. Many of the major Japanese electronics and automobile manufacturers, with highly successful products, have continued to rely on ethnocentric management styles in overseas expansion. However, the success of the ethnocentric viewpoint of the Japanese electronic and automobile industry might speak more to the desirability of these products in the global marketplace, and to the lack of competition to date in product quality, than to the global effectiveness of an ethnocentric style.[15] Mitsubishi Electric is an example of an globally successful ethnocentric organization, with an all-Japanese board of directors and Japanese managers with Japanese-style management practices—"the Mitsubishi way, as well as the Japanese way"—in all of their foreign affiliates.[16]

Localization—adaptation to the local conditions and culture of the target country—becomes an issue for ethnocentric organizations when their international growth under transplanted home- or source-country conditions becomes stagnant, falls off, or is otherwise threatened. For example, the recent Mitsubishi-U.S. sexual harassment controversy may affect U.S.-sales. The reported harassment could be related to unsuccessful transfer of a Japanese management style to the U.S. This would be essentially poor cultural localization, an ethnocentric error, on the part of Mitsubishi. Admittedly, localization to many individual

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14 Hedlund, "The Hypermodern MNC—A Heterarchy?" 12.

15 Leontiades, *Multinational Corporate Strategy: Planning for World Markets* 53.

16 Samuel Humes, *Managing the Multinational: Confronting the Global-Local Dilemma* (New York: Prentice Hall, 1993) 316.

countries can be an expensive global strategy. Careful localization to target-countries tends to accompany a polycentric more than an ethnocentric management strategy.

Polycentric

Polycentrism is an effort to be responsive to potentially competing demands or cultural expectations. Organizations can be described as following a polycentric strategy when they are involved in intensive localization efforts, with deep investment in target-country nationals' employment and local manufacturing as an effort to decentralize operations. The attention to localization of products and customer information does not preclude the use of other strategies. Nestlé, a Swiss firm, and PT Multi Bintang Indonesia (MBI), the Indonesian arm of Heineken, a Dutch firm, are examples of organizations which have used successful polycentric strategies in product production while maintaining a global perspective in operations. Since the early 1900's, Nestlé has customized products to regional needs across the globe.[17] MBI has worked with product tailoring and distribution on a tightly localized level in Indonesia, recognizing the cultural (e. g., ethnic and religious) differences within a single nation, and offering a great deal of autonomy to lower level managers.[18]

However, a cultural perspective extremely responsive to an individual territory's unique situation can be locally and globally problematic. An organization strongly committed to decentralization and highly aware of the complexity of national needs may find itself overwhelmed by polycentrism. According to Maddox, "a firm with a polycentric orientation believes that each foreign operation's environment is unique and difficult to understand and deal with from a home base; therefore, each foreign operation is given a great deal of autonomy to run its own affairs."[19] There are advantages and disadvantages to distancing headquarters from the affiliate. Smaller organizations, unsure of the international climate or values, often need to rely on local operators to establish and develop the international site; this cultural uncertainty can be unfairly exploited.[20] In larger organizations, a strongly polycentric organization with heavy investment in localization will avoid some of the cultural blunders in production and sales that can plague an overly ethnocentric, centralized organizations. Nestlé has been quite successful in this regard. However, local strategies can be so divergent that

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17 Greg Steinmetz and Tara Parker-Pope, "All Over the Map," *The Wall Street Journal* 26 Sep. 1996: R4.

18 Robert W. Hornaday, "PT Multi Bintang Indonesia (A)," *International Management: A Cross-Cultural and Functional Perspective*. ed. Kamal Fatehi (Upper Saddle River: Prentice Hall, 1996) 329-330.

19 Maddox, *Cross-Cultural Problems in International Business: The Role of the Cultural Integration Function* 54.

20 Jeffrey A. Tannenbaum, "Small Firms, Big Hurdles," *The Wall Street Journal* 26 Sep. 1996: R21.

corporate direction is lost. As a result, the organization functions more as a holding company than as a unified entity with an overall plan and goals coordinating the efforts of the parent and offspring. Over-localization can diminish or eradicate the competitive advantage of a subsidiary over local firms. The "innovative superiority" of the subsidiary is lost when local priorities eclipse international trends and developments. In such cases, then, "cultural adaptation as the sole concern can be as costly as no cultural adaptation."[21] The competitive advantages of size and unified operation are negated if too many operations must be duplicated by the subsidiaries at the local level, and the local subsidiary may actually perform less effectively than strictly local operations. Over-localization of communication can also be expensive.[22] For example, producing separate documentation and packaging for each country, a proven marketing gain, may not be necessary. In the same sense, it may not be necessary to translate all company documents in English into the languages of all the members of the affiliates, especially if the documents are written with an eye to translation.

A polycentric organization might expend great effort to insure that documents were translated from the language of the source country to that of the subsidiaries, using localization as an international communication strategy. Product documentation might be developed and written by the target country's own local marketing department, and might only marginally reflect information provided by the source company. Individuals in a polycentric organization might be encouraged to learn second and third languages to carry on some level of business with colleagues in affiliated countries. If deeply focused on cultural differences and technical issues of translation, however, people in a polycentric organization might choose to rely on professional translators to avoid miscommunication.

Unfortunately, professional translation can cause its own problems.[23] In particular, the addition of oral interpreters can add an unproductive level of artifice and formality, affecting the ease of communication and contributing to misunderstandings or even to a breakdown of the business venture in the worst cases.[24] Oral translation is complicated by variables such as the first language and subject matter expertise of the interpreter, how and by whom payment is arranged, and how the interpreter is treated by the different groups represented in the business

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21 Maddox, *Cross-Cultural Problems in International Business: The Role of the Cultural Integration Function* 55.

22 Hoft, *International Technical Communication: How to Export Information About High Technology.*

23 Iris Varner and Linda Beamer, *Intercultural Communication in the Global Workplace* (Chicago: Irwin, 1995).

24 Lyle Sussman and Denise M. Johnson, "The Interpreted Executive: Theory, Models, and Implications," *Journal of Business Communication* 30.4 (1993).

exchange. Oral translation by a trained interpreter is often unavoidable. However, oral interpretation is difficult to control or to evaluate, especially during the interpreting session.[25]

Written translation, a major component of document localization, internationalization, and globalization strategies, also presents some communication problems. Translation is often expensive, difficult, and error-prone. The numbers of errors made in translation increase with the complexity of technical detail, with increasing needs for speed, and with greater differences between the languages being translated, factors which tax the skill of both expert and novice translators. Organizations taking a geocentric strategic position might strive to avoid or minimize translation. Minimizing translation is a goal of both internationalization and globalization as product documentation strategies.

Geocentric

The tendency of organizations to oscillate between the extremes of ethnocentric and polycentric strategies can result in a more balanced perspective, one which Hedlund refers to as geocentric. "A geocentric orientation within the firm has been viewed as both a globally integrated business philosophy and a compromise between the extremes of ethnocentrism and polycentrism."[26] A true international firm, as defined by Asheghian and Ebrahimi, has no international departments or organizations; nothing is specified as foreign.[27] The large global "home market" is the ideal, rather than a series of local markets. As an ideal, the geocentric organization makes great good sense. In reality, persistent cultural differences make a single geocentric management style impossible to create. Maddox notes that "the great ease of managerial mobility and the use of third country nationals (an integral part of the geocentric philosophy) is a debatable result of a geocentrically oriented organization and appears to remain more fiction than fact."[28] That managers are not mobile and third country nationals do not solve problems in a global organization is borne out in the rate (16% to 40%) of expatriate managers returning early from out-of-country postings (because of either poor performance or poor cultural adjustment); an additional 50% of the remaining managers function at a low level

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25 Michael Kublin, *International Negotiating: A Primer for American Business Professionals* (New York: International Business, 1995).

26 Maddox, *Cross-Cultural Problems in International Business: The Role of the Cultural Integration Function* 55.

27 Parviz Asheghian and Bahman Ebrahimi, *International Business: Economics, Environment, and Strategies* (New York: Harper & Row, 1990) 414.

28 Maddox, *Cross-Cultural Problems in International Business: The Role of the Cultural Integration Function* 56.

of effectiveness.[29] Lack of managerial effectiveness has been related to inappropriate cultural perspectives, which may be in turn related to lack of adequate training and preparation.[30]

Geocentric management strategy can be viewed as a balancing act between ethnocentric and polycentric strategies. This metaphor describes Caterpillar Tractor's efforts in the 1970's to minimize translation problems in its international operations by developing a limited (950-word) English dictionary for product instructions.[31] The limited-word instructions were more easily read by many native speakers and non-native speakers of English, and also were more easily translated into other languages. Nonetheless, during the time when Caterpillar employed this dictionary, Caterpillar also employed an essentially ethnocentric market strategy. A competitor of Caterpillar noted: "It [Caterpillar] is so centralized, the worldwide price of any piece is set in Peoria, Illinois. In certain markets, like the Middle East, (we) can be much more responsive to local opportunities and conditions."[32] The imbalance between the ethnocentric market strategy represented by U.S.-pricing standards and the geocentric strategy represented by the limited-word instructions could be lack of alignment or could represent different goals being pursued by different divisions of the organization. U.S.-English-L1s and L2s found the limited-word instructions easier to read. Improvement for U.S.-English-L1s readers, an ethnocentric or local choice, could have been Caterpillar's primary goal, and improvement for L2s a secondary goal.

Another heavy machinery company, John Deere, uses graphics to meet global needs, employing the same pictures of "flatman," a stylized human figure, accompanied by text in different languages in equipment manuals. The use of "flatman" figures is predicated on the belief that "graphics designed to be as global as possible" are a "universal form of communication,"[33] and supports a geocentric management strategy. "Flatman" shows up in many places; on a tube of an anti-inflammatory drug, Voltaren™ by Ciba-Geigy AG, a Swiss pharmaceutical firm, a bent "flatman" holds its sore back on one side of the tube while the drug indications are presented in German and French on the other—the "flatman" graphic is a global

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29 J. Stewart Black and Mark Mendenhall, "Cross-Cultural Training Effectiveness: A Review and a Theoretical Framework for Future Research," *Academy of Management Review* 15.1 (1990): 114.

30 Black and Mendenhall, "Cross-Cultural Training Effectiveness: A Review and a Theoretical Framework for Future Research."

31 Margaret Thomas et al, "Learning to use Simplified English: A Preliminary Study," *Technical Communication* 39.1 (1992).

32 William H., Davidson and Philippe Haspeslagh, "Shaping a Global Product Organization," *Harvard Business Review* July/August (1982): 130.

33 Kostelnick, "Cultural Adaptation and Information Design: Two Contrasting Views" 192.

variable, and the languages are local variables for the mid-European market. These attempts to use graphics to bridge translation problems are, according to Charles Kostelnick, an indication that "visual language is still presumed to be 'universal.'"[34] This presumption of universal appeal is being tested on the Internet. Graphic Web links are used to make the John Deere Web site more accessible; for example, clicking on a bulldozer takes the user to the pertinent pages without reading English.[35] Graphics do not obviate the need for translation, although, as seen in the muffin scenario (in which a hand-drawn sketch clarified a design change), in Chapter One, they can supplement text. A geocentric organization would combine text and graphics to increase the accessibility of information.

In practice, geocentric management strategies seem to consist of making constant course corrections to adapt to new information from multiple sources or to respond to specific local demands for change. An organization can be geocentric in some aspects of its business and polycentric or ethnocentric in others. While Nestlé concentrates on local brands produced in the target countries, a very polycentric strategy, its personnel are selected from the target regions and the technology used is the "best" globally available, so that overall Nestlé employs a geocentric or heterarchic strategy.[36] Some organizations see the geocentric, or world market view, as a goal, and make a concerted attempt to maintain a wide-angle lens on market concerns. A number of such organizations have moved beyond the essentially hierarchical strategies I have described here as ethnocentric, polycentric, and geocentric, and have developed a "flatter" management strategy that Hedlund calls "heterarchical."[37]

Heterarchical

The heterarchical multinational corporation, an extension or special case of the geocentric corporation as described by Hedlund, resembles Jane Perkins' description of rhetorical corporations.[38] In rhetorical corporations, members of the organization work closely together without traditional hierarchy, a concept which has led to changed and new metaphors

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34 Kostelnick, "Cultural Adaptation and Information Design: Two Contrasting Views" 192.

35 Unfortunately, once linked, the information is still in English (URL = http://www.deere.com). The WWW's North American accent is both linguistically and technically based, which has slowed the spread of this new technology. Robin Frost, "Web's Heavy U.S. Accent Grates on Overseas Ears: Foreign Users Criticize Lack of Diversity in Language, Topics," *The Wall Street Journal* 26 Sep. 1996: B4.

36 Carla Rapoport, "Nestlé's Brand Building Machine," *Fortune* 19 Sep. 1994: 148.

37 Hedlund, "The Hypermodern MNC—A Heterarchy?"

38 Hedlund, "The Hypermodern MNC—A Heterarchy?"

Jane M. Perkins, "Communication in a Rhetorical Corporation: an Ethnographic Study of Change from Hierarchy to Self-Managed Teams," diss. Iowa State U, 1995.

to describe organizations. Hedlund modifies the common metaphor of the "brain of the firm" to "the firm as a brain," a definition which moves the concept of a firm beyond a brain (management) directing an unthinking body (workers) to an organization in which all actions are informed by thought.[39] This metaphor of the entire organization as a brain is seen in the "open-books" management philosophy put forth by Jack Stack, which draws on the resources and experience of all workers in planning business strategy.[40] "Open books" management views the development of business strategy as a series of moves in a game involving all workers, not just management, and relies on the idea of business as a challenging game to be enjoyed to motivate workers and to bring them into the business as involved and committed players.[41]

In the heterarchical or rhetorical corporation, individuals are aware of a great variety of exigencies and work actively to adapt to changing circumstances. The heterarchical corporation is not limited to businesses that focus on information and new technology, although a small company with a high proportion of its workers in direct research or other information transfer activities may more easily sustain the "firm as a brain" management philosophy than might a multinational conglomerate. The "open books" management plan encourages involvement of all workers, and has been applied in factory line-production organizations.[42] For example, Stack applied this concept profitably in the worker buy-out of an engine rebuilding plant, Springfield Remanufacturing Corporation (SRC), and in spin-offs of the original organization.[43] Suggestions for improving the engine plant's operations were given by all levels of management and line workers and then tested and adopted by management, a working example of the "firm as brain."

Another metaphor for the heterarchical corporation comes from Peter Drucker, who compares the current model for managers in a big firm to a conductor in an opera, pulling together a large number of different groups in a controlled performance. Drucker suggests that

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39 Hedlund, "The Hypermodern MNC—A Heterarchy?" 26.

40 Timothy L. O'Brien, "Company Wins Workers' Loyalty by Opening its Books," *Wall Street Journal* 20 Dec. 1993: A1

41 Alex Markels, "Team Approach: A Power Producer is Intent on Giving Power to Its People," *Wall Street Journal* 3 Jul. 1995.

Jack Stack, *The Great Game of Business* (New York: Currency Doubleday, 1992).

Jack Stack, "Springfield Remanufacturing Bought the Company and Learned to Play the Game of Open-Book Management," *National Productivity Review* 13.1 (1993-94).

42 Markels, "Team Approach: A Power Producer is Intent on Giving Power to Its People."

43 Leon Rubis, "Playing by the Books: Springfield Remanufacturing," *HRMagazine* May 1995.

a more effective metaphor for management of the organization is the jazz group. The group does not have a common score to play but comes together as "diversified groups that have to write the score while they perform."[44] Management's role in this improvisation is like a member of the ensemble.

Internationally, the heterarchical corporation has many centers, each contributing actions and ideas, just as in a jazz ensemble in which all parts contribute actively and creatively. To work effectively, each part of the organization must be acutely aware of the actions of the entire organization. Since there are many centers of control, with no one center taking coercive/bureaucratic control at the top of a hierarchy, control within the organization is, according to Maddox, "normative control," which requires that the centers and individuals "must be aware of central, or company-wide, goals and company-wide interdependencies."[45] The ensemble has to agree, then, on what they want to achieve and remain flexible to creative opportunities while playing together.

In a heterarchical corporation, management stresses communication as an important priority for the organization as a whole. Communications are adjusted to fit the needs of the individual on a case-by-case basis. A premier example of the philosophy of the heterarchical corporation in action is the Swedish conglomerate ABB (Asea Brown Boveri), formed in 1988 from two competing firms in Sweden and Switzerland and now consisting of "1,300 separate companies divided into 5,000 profit centres," which has leveraged a belief in "nuanced" globalization into clear profits.[46] English is the company language at ABB, although a second language for two-thirds of the employees, including Percy Barnevik, the company's CEO. Barnevik insisted on English as the company language to enable communication between nationalities.[47] Globalization for this electrical engineering firm is based on a strong belief that markets will continue to differ, and the successful company—the "multicultural multinational"—needs to be "diverse enough to respond to local tastes but united enough to amount to more than the sum of its parts."[48] ABB "is a company with a small core and only a thin layer of managers to supervise a myriad of subsidiaries and profit centres. . . . Its identity

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44 Peter Schwartz and Kevin Kelly, "The Relentless Contrarian," *Wired* Aug. 1996: 119.

45 Maddox, *Cross-Cultural Problems in International Business: The Role of the Cultural Integration Function.* 57-58.

46 "Face Value: The ABB of Management," *The Economist* 6 Jan. 1996: 56.

47 Andrzej K. Kozminski, "High-Speed Management and Global Competition," *High-Speed Management and Organizational Communication in the 1990s: A Reader.* eds. Sarah Sanderson King and Donald Peter Cushman (Albany: State U of New York P, 1994) 60.

48 "Face Value: The ABB of Management" 56.

is buttressed not only by its possession of a co-ordinating executive committee (with members from eight countries) but also by an elite cadre of 500 global managers [selected with] particular attention to the cultural sensitivity of its members, and to their spouses' willingness to move."[49] While top management is multinational, the "national companies are headed by locals and staffed predominately by locals."[50] As part of their "thinking globally, acting locally" strategy, ABB's matrix organization over-informs employees through a communication network moving frequent redundant messages throughout the organization.[51]

The four strategic positions and the international writing approaches most supportive of these strategies are shown in Table 2.2, illustrated by examples discussed in the text.

Management and communication strategies are not static; an organization can have several different strategies in action at any given time, varying according to needs. One of the goals of the IWCA is to determine if, based on analysis of the global strategic mission, the global management strategies, and international writing approaches, individuals are making rhetorical choices and using rhetorical strategies that support the organization's global mission.

Management and communication strategies are not static; an organization can have several different strategies in action at any given time, varying according to needs. One of the goals of the IWCA is to determine if, based on analysis of the global strategic mission, the global management strategies, and international writing approaches, individuals are making rhetorical choices and using rhetorical strategies that support the organization's global mission.

Comparison of Global Management Strategies and Individuals' Rhetorical Strategies

Large or fragmented organizations may have differing or even conflicting management strategies at different levels, or move through a series of strategic positions over time. While the heterarchical organization might sound ideal—and difficult to sustain—other global management strategies, including ethnocentric and polycentric strategies, can also be effective. A key goal is to align the organization's needs with the organization's actions, that is, to ensure that the global management strategies and individuals' actions align so that the global mission is more likely to be supported and met. Since international written communication at all levels of the organization is becoming a part of individual performance, an IWCA that can effectively

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49 "Face Value: The ABB of Management" 56.

50 Kozminski, "High-Speed Management and Global Competition" 60.

51 Donald P. Cushman and Sarah Sanderson King, "Communication in Multinational Organizations in the United States and Western Europe," *Communicating in Multinational Organizations*. eds. Richard L. Wiseman and Robert Shuter (Thousand Oaks: Sage, 1994).

assess individual effort can be a key tool for organizations to measure communication. The prototype IWCA, described in Chapter Four, is designed in two phases to assess both organizational and individual strategies. The first phase assesses the alignment of the global strategic mission and the global management strategies to determine if the second phase of the IWCA should be implemented or a different course of action is needed to address the misalignment of these critical strategies.

Table 2.2. International Writing Approaches Supporting Global Management Strategies

	Localization	**Internationalization**	**Globalization**
Ethnocentric	Source documents not modified. Belief: what works at home will work abroad (e.g., Tyco Toys' advertising in Italy)	Similar to localization	Similar to localization
Polycentric	Documents produced in target countries rather than in the home country (MBI-Indonesia's regional documents)	Translation of all documents into target country languages (Nestlé Foods)	Organizations concentrate on localization and internationalization
Geocentric	Limited use	Simplified English decreases translation (Caterpillar's reduced word dictionary)	"Universal" graphic language (John Deere's Flatman).
Heterarchic	National companies headed by locals, staffed primarily by locals (ABB)	Multinational top management speaks the same language (ABB)	Matrix organization over-informs, sends redundant messages throughout the organization (ABB)

Within organizations in general, individuals whose rhetorical strategies match the prevailing management strategy are more likely to be successful. In an ethnocentric-oriented organization seeking a high share of the national marketplace, an ethnocentric-oriented individual might be an excellent and successful employee. For example, IBM once held a very ethnocentric view of the world, and the most successful IBM man was one whose perspective on the world matched IBM's management strategy.[52] The organizations most likely to benefit from international workplace training or restructuring are those in which the majority of individuals' rhetorical strategies do not align with the organization's global mission. Suppose, for example, that an organization has a high number of ethnocentric-oriented employees in the source-country, and that the organization plans to employ a polycentric strategy of localized distribution in the target countries. Given this scenario, the localization teams could experience problems in obtaining adequate support from the source-country staff.

Critical to international training and to the appropriate interpretation of the IWCA results is an emphasis on the *majority* of individuals. While the majority of individuals' rhetorical strategies should align with the organization's global mission, just as the global management strategies should align with this overall mission, not all communication must be in complete accord with the global management strategy. With too much uniformity, the organization risks being unresponsive to changing circumstances and missing emergent opportunities. However, a group within an organization generally has one perspective prominent at a given time, which either changes when a more useful strategy is discovered or is recognized as the most useful strategy for the rest of the organization to follow. If a global strategic mission has been developed, a majority needs to act in accord with that mission. Consistent and effective action requires alignment between the organization's strategic mission and the actions of the majority of individuals. Alignment implies control and recognition of variability, which can be achieved by knowing the performance strengths and weaknesses of the organization and planning training or other action to improve performance. Organizations can begin to assess the strengths and weakness of workplace writing and to determine how that performance meets their needs by using an IWCA to examine their workplace writing in detail.

Training in workplace writing assumes that individuals can improve the presentation and delivery of international documents through consciously chosen rhetorical strategies. The growing literature on workplace writing strategies, particularly in international writing, provides a variety of possibilities to improve international communication. One intriguing possibility, based on implementation models being developed primarily in the software

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52 Part of the old IBM ethnocentrism was that the IBM man was male regardless of nationality.

industry, is to apply the same documentation strategies to workplace writing—localization, internationalization, and globalization—currently applied to consumer product documentation.

Implications of Alignment

Organizations planning international expansion or continued involvement in global ventures need to understand their existing international communication relative to their global mission. For optimal performance, all divisions and the majority of individuals within an organization need to align in the organization's targeted direction. Critical to this alignment is an understanding of the organization's current global mission, and how communication can support or undercut this chosen strategic direction.

An organization that does not have a large international component to its work and is not changing the scope of its market objectives might not need to modify its international approach. Such an organization would not be a strong candidate for international communication training. If, however, its mission were to enter the global market more aggressively, it would need to develop a more geocentric strategy and incorporate the economies of scale afforded by planned globalization of documents. During this planning stage, an IWCA could help the organization determine the type and amount of training necessary to prepare its workers to communicate more effectively with new colleagues and customers. If the work force approached international communication from a mostly polycentric perspective, focusing on localization strategies, the organization's communication would be misaligned with the global management strategy (e. g., to become more geocentric). Such an organization would be a good candidate for focused international communication intervention to implement the change in mission more effectively. The training could be evaluated by re-auditing the organization with an IWCA.

The framework just described introduces ways of thinking about global management strategies and their relationship to workplace communication as a macro perspective. Communication, however, also has a micro perspective. In the workplace, the micro, or individual, rhetorical choices ultimately represent the communication strategies not only of individuals but of the organization. Chapter Three focuses on individual rhetorical choices in documents and how these choices affect second language (L2) readers in the workplace.

CHAPTER THREE—RHETORICAL STRATEGIES FOR LOCALIZATION, INTERNATIONALIZATION, AND GLOBALIZATION

> All cross-cultural discourse in English involves some form of translation—of names, of institutions, values, and their inter-relations; and when two cultures with widely different value-systems communicate, one is made acutely aware of difficulties of the task, and sometimes not without a sense of helplessness.[1]

Workplace writers generally strive to match the needs of their situations with the needs of their readers. Writers consider their intended readers, and, as a result, the writers' assumed knowledge of context usually takes precedence over abstract notions of readability in an evaluation of workplace writing.[2] Individual rhetorical choices shape documents, and these choices can affect second language (L2) readers in diverse ways. However, much workplace writing is created quickly, with minimum opportunity for review. Review time may be curtailed when writers believe the text seems clear or that management's goals do not allow time to analyze or to seek review of a text. L2 readers can suffer more than L1 readers from L1 writers' assumptions of clarity, because the time required to read and interpret text may be greater for L2 readers than for L1 readers.

As part of a micro analysis of workplace writing that contributes to the development of the IWCA questions outlined in Chapter Four, this chapter focuses on contrastive rhetoric and linguistics research that provides insight into L2 readers' needs. In the development of the IWCA, I assume that in the workplace setting the document features behind many L2 readability problems do not reflect deliberate content-based choices by L1 writers. Rather, based on workplace observation, I assume that rhetorical choices made by L1 workplace writers reflect conflicting demands, time pressures, and diverse training more than a clearly

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1 Guo-Zhang Xu, "Code and Transmission in Cross-cultural Discourse: a Study of Some Samples from Chinese and English," *Discourse Across Cultures: Strategies in World Englishes*. ed. Larry E. Smith (New York: Prentice-Hall International, 1987).

2 Thomas N. Huckin, "Context-Sensitive Text Analysis," *Methods and Methodology in Composition Research*, eds. Gesa Kirsch and Patricia Sullivan (Carbondale: Southern Illinois UP, 1992) 85.

articulated set of writing strategies.[3] Because L1 writers in the United States tend to have less experience writing for L2 readers than for L1 readers, their default writing strategy, employed under pressure, is to write for an audience similar to themselves rather than for readers with different needs.

Localization, internationalization, and globalization writing strategies, as developed in the software industry for customer and user information, explicitly address the similarities and differences between source (L1) writers and the target (L2) readers. One aspect of these strategies is the analysis of business and linguistic/cultural situations which Nancy Hoft refers to as a balance between "economy (business needs) and cultural understanding (user needs)."[4] To meet user needs economically for large-scale document production, where an information product is the organization's primary goal, Hoft recommends a five-step international user analysis:[5]

- research international variables
- choose a model of culture
- analyze the competition
- identify international resources
- synthesize the data

These five steps apply in varying degrees to all international product creation and workplace writing. This IWCA, which is in part a user needs analysis, focuses on the workplace performance of L1 writers who write as part of their job but are not professional writers. Therefore, the most important of the above five steps are to research international variables, to be aware of models of culture, and to synthesize data. In this chapter, I discuss uncovering international variables, cultural communication models, and their applicability to internationalization, globalization, and localization. The IWCA instrument itself (Chapter Four) represents a synthesis of this data to reflect L2 readers' needs.

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3 Communication strategies are defined by Faerch and Kasper as "potentially conscious plans for solving what to an individual presents itself as a problem in reaching a particular communicative goal," in Elaine Tarone and George Yule, "Communication Strategies in East-West Interactions," *Discourse Across Cultures: Strategies in World Englishes*, ed. Larry E. Smith (New York: Prentice-Hall International, 1987) 51.

4 Nancy L. Hoft, *International Technical Communication: How to Export Information About High Technology*, Wiley Technical Communication Library (New York: John Wiley, 1995) 57.

5 Hoft, *International Technical Communication: How to Export Information About High Technology* 60.

Uncovering International Variables

Localization, internationalization, and globalization of information products depend heavily on recognizing the similarities and differences for a number of dimensions or variables among cultures, language groups, or countries. Localization focuses on the specific needs of a single culture, language group, or country. Internationalization in general tends to focus more on differences while globalization tends to emphasize similarities.

Researching the international variables to highlight similarities and differences, as suggested by Hoft, requires choosing a number of dimensions important to the use of the product, the individuals, the organizations, and/or the countries involved. The choice of variables on which to focus depends in part on the model of culture or communication selected and in part on the needs of the organization. A simple description used in many cross-cultural training presentations is the Iceberg Model. This is portrayed by Hoft as a three level, surface-unspoken-unconscious rules system of which only 10% of the rules, like the iceberg's tip, is immediately apparent while the remaining 90% of the rules, is unnoticeable to members of the culture.[6] Hoft uses the iceberg model as a framework to categorize what she considers the most useful features of models by Edward T. Hall, David Victor, Geert Hofstede, and Fons Trompenaars. This tactic illustrates the flexibility of model application and analysis in developing better workplace solutions.[7] Using the iceberg model as a starting point, Hoft recommends researching political, economic, social, religious, educational, linguistic, and technological attributes as the international variables of the target countries or cultures (see Table 3.1).

Table 3.1. A Worksheet for Data for International Variables

Target Country: Target Language:							
	Political	Economic	Social	Religious	Educational	Linguistic	Technological
Similarities							
Differences							

6 Hoft, *International Technical Communication: How to Export Information About High Technology* 59.

7 Hoft, *International Technical Communication: How to Export Information About High Technology* 114.

These seven attributes describe user needs (e. g., cultural understanding) that organizations must continually balance relative to business needs (e. g., economy). The balance, or alignment, of these needs must be part of any international writing strategy, regardless of the choice to localize, internationalize, globalize, or employ a combination of these strategies.

Choosing a Model

For this prototype IWCA, which focuses on L1-produced text readability for L2s from a textual and cultural perspective, I have chosen three overlapping categories for discussion and analysis:

- message pragmatics
- translation and readability
- cultural understanding

Cultural understanding is a goal of Hoft's seven-factor analysis starting point. In addition, for this IWCA message pragmatics and translation and readability are emphasized because these categories are central to written international communication and represent areas in which performance diagnosis and strategic intervention are possible. Elements of these three categories represent issues discussed in the research and applied literature of international communication, cross-cultural workplace writing, linguistics, and contrastive rhetoric. Some of this literature is reviewed in this chapter as a precursor to describing the IWCA in Chapters Four through Six.

Other categorizations and models of features important to international communication differ somewhat from the IWCA's three-variable analysis categories. For example, "utilitarian discourse," a business communication style which Ron Scollon believes is becoming a global standard, has four parts as shown in Figure 3.1.[8] Scollon's face systems, forms of discourse, and socialization correspond closely to the IWCA's three categories of message pragmatics, translation and readability, and cultural understanding. Ideology, Scollon's fourth division, is frequently featured in an organization's mission statement and is a factor in description of an organization's international stance. Ideology is subsumed as part of cultural understanding in the IWCA.

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8 Ron Scollon, "From Pidgin English to Professional Communication: English Teaching and the Utilitarian Discourse System," *Explorations in English for Professional Communication*. ed. Paul Bruthiaux, Tim Boswood and Bertha Du-Babock (Hong Kong: City University of Hong Kong, 1995) 33.

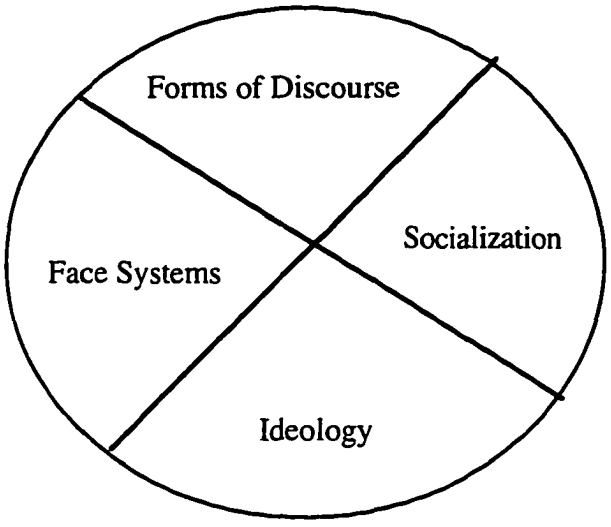

Figure 3.1. Scollon's Four Elements of the Utilitarian Discourse System.[9]

Background knowledge (e. g., socialization or cultural understanding) shared by participants is a key variable in international communication models based on Shannon-Weaver's 1949 sender-receiver model, such as Haworth and Savage's Channel-Ratio model. Like Grice's maxims of conversational implicature discussed later in this chapter, the majority of international communication models were first developed to describe face-to-face communication. E. T. Hall's original 1959 sketch of human activity (formal, informal, and technical aspects) includes explicit and implicit cultural assumptions or markers,[10] which he and M. R. Hall developed into a continuum defining cultures from high context (e.g., Japan and China) to low context (e.g., the United States and Switzerland).[11] Awareness of implicit and explicit knowledge is a primary feature of Haworth and Savage's Channel-Ratio model.[12] Although Haworth and Savage focus on face-to-face interaction, L1 writers can draw on the idea of explicit and implicit knowledge to decide how much information to provide for L2

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9 Scollon, "From Pidgin English to Professional Communication: English Teaching and the Utilitarian Discourse System" 39.

10 Edward T. Hall, *The Silent Language* (Garden City: Doubleday, 1959).

11 Edward T. Hall and Mildred Reed Hall. *Understanding Cultural Differences: Keys to Success in West Germany, France, and the United States* (Yarmouth: Intercultural Press, 1990).

12 D. A. Haworth and Grant T. Savage, "A Channel-Ratio Model of Intercultural Communication: The Trains Won't Sell, Fix Them Please," *Journal of Business Communication* 26.3 (1989).

readers. Implicit and explicit knowledge relates to the similarities and differences dimension of Hoft's search for international variables. Haworth and Savage's model was a stepping stone for Linda Beamer,[13] who theorizes that intercultural communication reflects the participants' cultural schema or cultural knowledge. This "schema sharing" is a more culturally-diffuse model than the sharing of implicit and explicit information proposed by Haworth and Savage.

A slightly different set of seven major elements unstable across cultures and critical to balance in cross-cultural communication is outlined in David Victor's LESCANT mnemonic:[14]

- language
- environment and technology
- social organization
- contexting
- authority conception
- nonverbal communication
- temporal conception

All seven LESCANT elements are potential variables to evaluate in an IWCA, from the nature of language used to the time frame in which people consider a response acceptable. This IWCA, however, is designed to assess workplace texts. Therefore, it focuses more on language (e. g., word choice), environment (e. g., typical mode of transportation), contexting (e. g., how much information is explicitly provided), nonverbal communication (e. g., visual rhetoric) and temporal conception (e. g., time zones), with less emphasis on authority conception (e. g., attitudes about and towards authority) and social organization (e. g., chains of command). These latter two elements influence message-routing and construction of tone, especially in choosing politeness strategies, and belong in analyses of written communication. Social organization becomes more important when extending the IWCA beyond a focus on documents to issues of alignment between individuals' writing approaches, the global management strategies, and the global strategic mission.

As this brief review illustrates, a number of international communication models exist to help writers conceptualize international variables critical to their efforts at localization,

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13 Linda Beamer, "A Schemata Model for Intercultural Encounters and Case Study: The Emperor and the Envoy," *Journal of Business Communication* 32.2 (1995).

14 David A. Victor, "Advancing Research in International Business Communication," *The Bulletin of the Association for Business Communication* 57.3 (1994): 41.

internationalization, and globalization. Because internationalization and globalization are closely related strategies, textual elements related to these two strategies are discussed in the next section. The section following discusses localizing the IWCA.

Internationalizing and Globalizing the IWCA

When writing in English for L2 readers, some issues relevant to internationalization and globalization tend to overlap. Because of costs, source country translation of routine or "one-shot" documents into target languages is seldom provided for L2 readers, so the internationalization strategy of full or partial translation is not an option for many workplace documents. In a workplace in which the source country workers are in contact with only a few target countries, the differences between the source and target country might drive the document production. In this case, in which differences are highlighted, internationalization is the strategy, and writers focus on what is different in those target countries that must be recognized in the document. In a workplace in which the source country workers are in contact with many countries or a constantly changing set of countries, similarities more than differences between the source and target countries would influence document production as the source country writers seek to minimize the number of versions of the document required as a globalization strategy.

In both writing strategies, however, the goal is to improve the L2 readers' comprehension and processing time of text by focusing on the kind of information (e. g., message pragmatics), on the presentation of information (e. g., translation and readability issues), and on culture-neutral references (e. g., cultural understanding). For many workplace documents, L2 readers are both the intended audience and the *de facto* translators. Within those two roles they respond to both the message pragmatics and the difficulty of translation, factors in turn influenced by the level of cultural understanding of L1 writers. In the following three sections, I discuss these overlapping elements as they relate to the development of this IWCA.

Message Pragmatics

Pragmatic behavior categories, such as politeness, can cover a wide variety of actions. Certainly, every writing-related act—from forgetting to run a spelling checker to including information that enables readers to act—can be considered a politeness issue. While politeness as an umbrella term covers a wide range of individual actions or strategic choices, an effective workplace tool must focus on how these individual strategic choices relate to the main communication goals of organizations.

Politeness issues in primarily written relationships (many built, both within the U.S. and internationally, without any face-to-face contact), are related to the development and persistence of readers' perceptions. A good IWCA looks for evidence of writers' efforts to be polite, especially in documents sent to cultures perceived to place high emphasis on "face." Face is a good example of the application of Hoft's similarities and differences analysis. *Every* culture places value on face, although cultures define face and face-threatening acts differently.[15] Politeness is defined differently by Polish- and English-speaking groups; using these two languages as an example, Anna Wierzbicka discusses in particular how absences of politeness actions in one culture or language are extremely difficult to trace in another culture or language.[16] Different researchers define politeness strategies as reflecting different cultural viewpoints. For example, Ron Scollon and Suzanne Wong Scollon's[17] description of the relationships of power and distance within communication are different from Penelope Brown and Stephen Levinson's.[18] Scollon and Scollon identify Brown and Levinson's positive politeness strategies as those aimed at involvement of the hearer/reader and their negative politeness strategies as fostering independence on the part of the hearer/reader (Brown and Levinson also consider negative politeness strategies as independence strategies). With this characterization of politeness strategies as representing degrees of involvement or independence, Scollon and Scollon move away from the more binary positive/negative connotations of the Brown and Levinson terminology, a move which may prove more useful in describing levels of politeness strategies and behavior in intercultural contexts.

A useful discussion of politeness as part of message pragmatics for L2 readers is found in H. P. Grice's Cooperative Principle, four main categories composed of maxims (quantity, quality, relation, manner) divided into attendant submaxims.[19] The Cooperative Principle implies a relation between speaker and listener in which both sides are invested in cooperating and understanding the communicative goals. The less the goal of the speaker is understood by the listener, or if the speaker and listener are in conflict, the more likely that the maxims will be

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15 LuMing Robert Mao, "Beyond Politeness Theory: 'Face' Revisited and Renewed," *Journal of Pragmatics* 21 (1994).

16 Anna Wierzbicka, "Different Cultures, Different Languages, Different Speech Acts," *Journal of Pragmatics* 9.2 (1985).

17 Ron Scollon and Suzanne Wong Scollon, *Intercultural Communication: A Discourse Approach* (Cambridge: Blackwell, 1995).

18 Penelope Brown and Stephen C. Levinson, *Politeness: Some Universals in Language Usage* (Cambridge: Cambridge UP, 1987).

19 H. P. Grice, *Studies in the Way of Words* (Cambridge: Harvard UP, 1989) 26-27. Brown and Levinson's model grew out of Grice's work.

violated in some way. This is a common occurrence in cross-cultural communication, when culture-specific expectations (e. g., understanding) may be different or in conflict even though participants may share organizational goals.

The early form of the Gricean model represented cooperative face-to-face transactions. In written communication, the components of the maxim of manner (e. g., be brief and avoid ambiguity) may be in conflict with each other or with components of the maxim of quantity (e.g., do not make your contribution more informative than required) if the two partners do not agree on what is enough information or what is ambiguous. Grice's model assumes L1-L1 communication, However, when the two partners do not share a common culture or language, the definition of ambiguous becomes—more ambiguous. Vocabulary choice can make instructions ambiguous for L2 readers with limited reading skills, causing confusion between prepositions and pronouns, or subject-object relation (e.g., "Make the director a list"). The order in which graphic instructions are displayed can be ambiguous for L2 readers if the graphics are meant to indicate a left-to-right sequence of actions and the L2s are Arabic, and come from a right-to-left reading culture. For example, Roy Hartshorn reported the failure of left-to-right laundry instructions, which indicated to Middle Easterners, pictorially, that the detergent made clothes dirty.[20] In the IWCA, directionality of graphics and text relative to the cultures involved is an analysis issue.

Other pragmatic issues, such as timing and mode of message transmission, vary with workplace, time zones, and countries involved. John W. Gould, P. Thomas McGuire, and Chan Tsang Sing surveyed managers in 43 offices (21 in Hong Kong, 22 in California) to determine the efficacy and frequency of telex, letter, telephone, in-person, courier, computer, and telegram communication. They analyzed each mode's positive and negative features and discussed possible safeguards to ensure optimal transmission between offices—in this case, Hong Kong and California—that have only two working hours' overlap per business day.[21] In addition to mechanical issues ranging from high costs to poor quality paper or drawbacks to the media, Gould, McGuire, and Chan addressed rhetorical safeguards related to these exchanges. The rhetorical safeguards included using special vocabularies and confidentiality codes for telex transactions, requiring acknowledgment of message receipt by return telex, fostering patience

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20 William Horton, "The Almost Universal Language: Graphics for International Documents," *Technical Communication* 40.4 (1993).

21 John W. Gould, P. Thomas McGuire, and Tsang Sing Chan, "Adequacy of Hong Kong-California Business Communication Methods," *Journal of Business Communication* 20.1 (1983).

with solecisms (noted as a problem on both sides of the Pacific), and promoting use of company style manuals.[22]

Many organizations have some form of style manual, although all levels or divisions of employees may not necessarily use the style manual well.[23] The IWCA, therefore, includes a branching series of questions about style manuals that "waterfalls" from the first basic question (e. g., "Is there a style manual in-house?"—if no, then skip to question **X**) through progressively more explicit questions about frequency of use and follow-up or document control (e. g., "How often are documents reviewed for adherence to the style manual?"). Part of the construction of the IWCA, discussed in Chapter Four, involved considering various outcomes and possible branching paths for questions, given the wide variety of document control strategies and individual interpretations of house rules. The IWCA needs to be sensitive to strategies and practices and how they relate to organizational standards.

Style manuals are especially useful to organizations that translate source documents into target languages as part of their international communication strategies. These style manuals help writers produce source text that professional translators can translate more easily. In addition, writers can use these manuals to produce text that is easier to read for L2 readers who work without the aid of professional translators.

Translation and Readability

The use of style manuals and agreed-upon vocabularies, then, bleeds over into concern with translation and readability, a second major issue for international written workplace communication. Attention to translation belongs in *any* audit of written workplace communication, because, according to Larry Mikulecky, translation and literacy issues are becoming more problematic in L1-L1 English use in the U.S.[24] Margot Northey reports surveys of management in five of the "Big Eight" (now "Big Six") accounting firms, in which fewer than 4% of L1 partners and managers said documents written by L1 supervisors were

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22 Gould, McGuire, and Chan, "Adequacy of Hong Kong-California Business Communication Methods" 36-37.

23 "Style Manuals" can range from a few pages describing standard documentation templates and a few key acronyms or word preferences to full-size books and required dictionaries. Software firms are at the forefront in creating localization, internationalization, and globalization manuals to govern the production of both software code and attendant user-documentation.

24 Larry Mikulecky, "Basic Skills Impediments to Communication Between Management and Hourly Employees," *Management Communication Quarterly* 3.4 (1990).

"often" well-written. According to these surveys, all or most documents suffer from lack of clarity, poor organization, faulty grammar and punctuation, and wordiness.[25]

Working L1 U.S. English business documents are often unpolished drafts-in-progress, transmitted "as is" to show progress or initiate action. Within the U.S., these documents are often quite functional and effective. However, letters, instructions, proposals, and especially e-mail postings may contain typos, misspellings, sentence fragments, TV slang, jargon, subject-verb agreement errors, indefinite pronoun errors, locally popular acronyms, or lengthy, discursive text.[26] U.S. English L1 readers have become accustomed to working with unpolished texts, especially electronic ones, although people often notice problematic writing.[27] The amount of time and goodwill lost through non-standard presentation to international L2 clients and partners will be as high as or higher than the time and goodwill lost owing to similar problems in L1-L1 text exchanges, yet to date the quality of L1 text and its effect on L2 readers' comprehension has not been well-studied. Published research goes the opposite direction, exploring non-standard usage common to L2 writers and the effects of such usage on U.S. English L1 speakers.[28]

Translation issues are a cornerstone of the IWCA instrument, since the same features in a document that pose a problem for professional translators are problematic for L2 readers. Translation in this IWCA refers primarily to the work done by an individual who translates as part of the job, not to professional translation as a job itself. L2 readers, especially those new to the workplace, may approach much of their technical reading in English as translation or transliteration (word-for-word translation), and therefore have trouble processing working drafts. Even "people with a sound knowledge of English are lost in the business jargon of Americans: FOB, CIF, OUS, or, 'The shipment should be covered for 150% of invoice value

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25 Margot Northey, "The Need for Writing Skills in Accounting Firms," *Management Communication Quarterly* 3.4 (1990): 483-485.

26 As noted by a necessarily anonymous industry translator, L1 Chinese, working in English and Chinese for a major U.S. company, June, 1996. "While . . . doing some translation, . . . I was appalled at some of the poor writings. Not only were they insensitive to L2 needs, but also were very poor in terms of writing basics." This example reflects both cultural understanding and translation issues.

27 The acceptance of fractured documents seems to have developed during because people became used to writing within the constraints of early e-mail technology, and because many people who learned to use computers had never learned to type efficiently.

28 Roberta J. Vann, Frederick O. Lorenz, and Daisy M. Meyer, "Error Gravity: Faculty Response to Errors in the Written Discourse of Nonnative speakers of English," *Assessing Second Language Writing in Academic Contexts*, ed. Liz Hamp-Lyons (Norwood: Ablex, 1991).

against All Risks.'"[29] Clearly, writing that saves professional translation time or can stand alone without translation can represent substantial cost savings to an organization with alliances in many countries or with products sold in many different regions. Translation of documents is a major issue for professional writers in multinational corporations.[30] To improve translation, Sanderlin suggests that writers place higher priority on issues such as grammar, vocabulary complexity, length of sentences, and spelling.[31]

Time loss or difficulty in translation is not limited to misunderstanding a typographical error or non-standard usage, but includes density of information provided. The simple time requirements of reading in a second language may cause L2 readers to resent verbose L1 writers. L2 readers who spend an hour or more to read text, only to realize no gain in substantive information rightly may be frustrated, discouraged, and angry at the lack of respect the L1 writers have shown for L2 readers.

Translation time and effort are obviously affected by vocabulary choices, for L2 readers' vocabularies may be rather small. In recognition of their restricted vocabularies, in the mid-1920s the BASIC (Business Academic Scientific Industrial Commercial) English movement tried to address L2 readers' needs.[32] The BASIC system, with a reduced vocabulary (850 words) and simplified grammar, was used to teach English to L2 speakers and presented as a world language possibility in opposition to other active natural languages, Latin, or Esperanto. BASIC English spawned a number of programs focusing on reduced word set dictionaries as a direct response to L2 speakers' vocabulary disadvantage in the international organization, to improve communication by simplifying or standardizing written English.[33]

For example, the Caterpillar Tractor Corporation (1971) used Fundamental English with a 950-word vocabulary, and Douglas Aircraft (1977) uses a technical manual dictionary

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29 Baolin Zong and Herbert W. Hildebrandt, "Business Communication in the People's Republic of China," *Journal of Business Communication* 20.1 (1983): 27.

30 Mark I. Hallman, "Differentiating Technical Translation from Technical Writing," *Technical Communication* 37 (1990).

Deanna Hammond, "Meeting the Need for High-Quality Technical Translations Today," *Technical Communication* 36 (1989).

Peter Rossell and Mary K. Roll. *Cross-Cultural Technical Translations from an Isolated Translator to a Business Communicator*, 1990.

31 Stacey Sanderlin, "Preparing Instruction Manuals for Non-English Readers," *Technical Communication* 35.2 (1988).

32 C. K. Ogden, *The System of Basic English*. first ed. (New York: Harcourt, Brace and Company, 1934).

33 Margaret Thomas, et al, "Learning to Use Simplified English: A Preliminary Study," *Technical Communication* 39.1 (1992).

restricted to 2,000 words to write documents for worldwide use.[34] These company style guides are similar in concept to a computer-assisted system for writing simple English being developed at the University of Central Florida by Thomas et al. (1992), who use the acronym SE (Simplified English) for their Controlled English rule system and SEAN (the Simplified English Analyser) for its companion computer system. This SE system has a "core vocabulary of 1,500 words and a set of approximately 40 rules that govern style and grammar."[35]

Computer–based style guides can be useful even in a monolingual setting. A computer-based writing tool such as SEAN offers potential time savings and promotes uniformity and standards across a company.[36] For example, technical writers in a software house can use a customized grammar checker and style guide to standardize chapters written by many different authors into a particular style, so that the finished product reads as if written by a single author. Internationally, relatively simple English—short sentences, limited word choice, active tense—is easier for L2 readers to process. The use of simplified English, whether electronically or manually implemented, can circumvent the need for translation of technical documents, representing a great savings in time and money for an organization.[37]

In summary, internationalization and globalization of documents involves attention to translation and readability issues. As a gauge of the extent to which translation issues are part of writing performance, the IWCA measures vocabulary usage and sentence structure, as well as density of information. The research literature suggests that limited word dictionaries effectively reduce both translation time and need for translation, and speed L2-processing of L1-English documents. In an organization using a reduced dictionary, in which word choice is already constrained and vocabulary issues already largely addressed, I expect that issues related to cultural understanding become more important to evaluate.

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34 Although Caterpillar's dictionary is frequently cited, the dictionary itself may have been either a short-lived project or a small pamphlet in use in one division rather than company-wide. Interlibrary Loan contact with the Caterpillar main library in Peoria has turned up no knowledge, more than 20 years after the cited publication date, of this document. A second possibility is that the dictionary is subsumed in a larger training effort and is not free-standing, a possibility supported by a brief article, "Caterpillar Designs Easier Maintenance Manuals" in *Business International* (6 Apr. 1973).

35 Margaret Thomas, et al, "Learning to Use Simplified English: A Preliminary Study" 70.

36 In a sense offering to the writer, at a higher level and interactively, the kind of standardization available when they format documents through the use of templates and SGML coding.

37 The use of "simple" English will not preclude cultural problems related to metaphors or other unfamiliar representations.

Cultural Understanding

This category poses difficulties conceptually and semantically: What label should be applied to cultural knowledge displayed by rhetorical choices in documents? The term should be neutral and convey both awareness and action. While I considered "cultural openness" (open to many cultures) and "cultural neutrality" (not obviously tied to a culture), Hoft's term "cultural understanding" seems to be a more accurate description of this important category. "Cultural neutrality" is neither a feasible goal nor even a meaningful concept. "Cultural sensitivity" and "cultural awareness" are possible labels, both flawed because they connote an emotional responsiveness which might make U.S.-business people uncomfortable. "Cultural skills," "cultural facility," and "cultural capability" are other candidates to describe the writing skills I discuss in this section. "Cultural Understanding" best projects the pragmatic concerns of this IWCA, again, that actions should be estimable from written text.

Business writers since Edward T. Hall have explored the diverse cultural views underlying spoken and to some degree written communication; they consistently emphasize the importance of cultural awareness and skills to successful international business.[38] Even as awareness of the global marketplace grows, converting awareness into action is difficult for organizations. The L1 attitude of the non-accommodating dominant culture is reflected in both historical and current business practices in the U.S. In fact, language knowledge and cultural awareness are not traditionally factors in overseas placements for U.S. managers.[39] In 1992, Collette Frayne and J. Michael Geringer reported a survey of 101 general managers from 42 international joint ventures. Fewer than 25% of the managers received advance cultural training.[40] According to a recent survey by Runzheimer International, only 58% of polled

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38 John P. Daniels, Hugh M. Shane, and Jerry L. Wall, "Doing Business Abroad: The Problem of Training for Cultural Differences in Communication," *J. Technical Writing and Communication* 13.4 (1983).

38 Helen Deresky, *International Management: Managing Across Borders and Cultures* (New York: HarperCollins, 1994).

Hall, *The Silent Language.*

Geert Hofstede, *Culture's Consequences: International Differences in Work-Related Values* (Beverly Hills: Sage, 1980).

Sondra Thiederman, *Profiting in America's Multicultural Marketplace: How to Do Business Across Cultural Lines* (New York: Lexington Books, 1991).

39 Marianne Inman, *Foreign Languages, English as a Second/Foreign Language, and the U.S. Multinational Corporation.* ERIC—Clearinghouse on Languages and Linguistics. Vol. 16 (Arlington: Center for Applied Linguistics, 1978).

Edwin L. Miller, "The Overseas Assignment: How Managers Determine Who is to be Selected," *Michigan Business Review* 24 (1972).

40 Colette A. Frayne and J. Michael Geringer, "A Training Program for General Managers of International Joint Ventures," *Journal of Management Education* 16 (1992): 102.

United States companies offer formal host-country orientation to workers taking international posts.[41] This seemingly low investment in the placement of U.S. workers in other countries is linguistically consistent with theory that describes dominant language/dominant culture as non-accommodating to non-dominant cultures, (i.e., organizational ethnocentrism). In a global economy, or the borderless world described by Ken'ichi Omae, organizations may find this hierarchical or privileging strategy inconsistent with their new international goals and missions.[42] The organization may have an expressed goal that requires new levels of international performance or a change in organizational orientation, while individual departments or workers continue "business as usual," operating in the old organizational mode and not adapting quickly to organizational changes.

Typically, when faced with an unfamiliar situation, people try to generalize based on the data available, even though that data may be limited. Contact with someone from a different nation, or even a different language group in the same nation, is an unfamiliar situation for many U.S.-English speakers. Consequently, their efforts in international communication may be constrained by their lack of knowledge. Internationally, Beamer suggests that individuals tend to interact with an ever-shifting idea of the others' culture, a form of cultural stereotype, rather than with actual individuals.[43] This "cultural schema" may be a useful construct to describe early or infrequent interactions; for example, when first meeting someone from the People's Republic of China (PRC), the most important thing may be that the individual is from the PRC, and all that one knows second and third hand about the PRC come into play—for good or ill—in attempts to communicate appropriately. By the time one meets the 100th+ person from the PRC, and has met that person half a dozen times in as many different contexts, the "PRC Chinese" and "U.S. American" schemas are not obviously communicating with one another. In the same sense, stereotyping as an interaction mode seem less likely to hold in the workplace after a number of exchanges are made and individuals develop relationships, unless the two parties never meet face-to-face or voice-to-voice.

The formal investigation of international variables for similarities and differences can help speed the formation of useful schemas for workplace writers (see Appendix 5 for a sketch of a similarities and differences matrix for PRC Chinese and U.S. English speakers). The cultural issues are easier to generate with the worksheet shown in Table 3.1. Once noted, the

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41 "Business Bulletin: A Bon-Voyage Wish," *Wall Street Journal* 18 Jan. 1996: A1.

42 Ken'ichi Omae, *The Borderless World: Power and Strategy in the Interlinked Economy* (New York: Harper Business, 1990).

43 Linda Beamer, "A Schemata Model for Intercultural Encounters and Case Study: The Emperor and the Envoy," *Journal of Business Communication* 32.2 (1995).

information needs to be categorized as much as possible into textual features which reflect cultural understanding including types of graphics and cultural references (e.g., sports, TV programs, food). Avoiding cultural "hot buttons" is vital to good international communication, but the hot buttons need to be identified before they can be avoided.[44] Identifying cultural problems in documents is one of the goals of the IWCA. Measuring and analyzing these topics are explored in more detail in Chapters Four, Five, and Six, while touching briefly here on several graphics and contrastive rhetoric research issues important to culturally alert written communication.

The use of graphics and the kind of graphics used in documents may be considered a translation and readability issue or a cultural understanding issue. Graphical displays seem to help improve text, especially in communication with the Japanese.[45] These research observations were echoed in a 1993 conversation with Bill, a Des Moines engineer:

> We'd get into these loops with the guys in Japan. I'd send them something and they wouldn't understand it or they would try to read between lines something that wasn't really there, and I'd get this fax back from them that was like, you know, way off third base. So I'd have to send them another fax to try to correct the first fax, and we had like a snowballing, constant course correction . . . I've always tried, always, for years, I was in this business for six months and I realized how important pictures were. A very good picture can instantly squelch hours of debate and it's a real time saver. Silence![46]

Bill is an example of a good international communicator, someone who learned early to actively avoid communication problems with his Japanese counterparts. He noted ". . . the Japan folder is about three inches thick, the European folders are anywhere from a quarter to a half inch thick" as an example of the different volume of correspondence. Much of the volume consisted of follow-up questions, often many questions and multiple faxes in response to the language in a single fax. Bill spends an hour, minimum, on a fax to Japanese engineers—yet

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44 Robert Kaplan, Ellen Touchstone, and Cynthia Hagstrom conducted a study of banking literature translated into Spanish, Japanese, and Chinese, and the attitudes of the banks toward these groups. One of the offensive stereotypes they discovered in the translated materials was the insinuation that the linguistic minorities did not have much money and did not understand basic banking services. Robert B. Kaplan, Ellen E. Touchstone, and Cynthia L. Hagstrom, "Image and reality: Banking in Los Angeles," *Text* 15.4 (1995): 444-45.

45 Christina Haas and Jeffrey L. Funk, "'Shared Information': Some Observations of Communication in Japanese Technical Settings," *Reading Empirical Research Studies: The Rhetoric of Research.* ed. John R. Hayes, et al. (Hillsdale: Lawrence Erlbaum, 1992).

Catherine Lombard, "Let's Get Visual: Revelations After Six Days with Japanese Customers," *Technical Communication* 39.4 (1992).

46 Carol Leininger, *Multinational Communication in a High Technology Corporation: A Case Study*, Unpublished presentation, International ABC Conference, Montreal, Canada, 1993.

10-15 minutes at the most on a single e-mail. A self-confessed miserable speller, Bill has an editor check his externally bound documents for correctness. Bill understands the problems his audience faces and applies this knowledge. He notes that the U.S.-based engineers had an advantage in their available tools. "Those poor guys in Holland, they do—what do you call it—character pictures, you know, where you use the vertical bar and dashes, like to do boxes—I mean, they're so desperate to be able to do a picture that they'll resort to that." If analyzed in an IWCA, Bill's written work, one would assume, would reflect certain choices helpful to international communication (e.g., inclusion of graphics and standard mechanics). Bill is a savvy international communicator, yet his use of metaphors is a weakness in his international communication. In this instance, Bill was speaking L1-L1, and using a number of sports metaphors that are culturally problematic in some L1-L2 settings. His metaphor—"way off third base" is better for the baseball-savvy Japanese than is the term "snow-balling," although for German nationals the familiarity of those metaphors is reversed.[47] His faxes, although carefully written and illustrated, contain problematic metaphors, especially the faxes sent simultaneously to people in several different countries.

Bill mentioned the difference electronic mail had made to his perception of the workplace. Life before electronic mail was life in a bubble—everyone was isolated. The work environment opened up for him when electronic mail became available in his firm ten years ago. His company, like many other international organizations, relies heavily on electronic mail to communicate with engineers in other countries, for both record keeping and quick connection across time zones. Connection across time zones can be problematic, especially when typical working hours do not intersect across time zones.[48] Different holidays are free days in different countries, making short turn-around demands difficult or impossible to fulfill at times. Obviously, tracking holidays in other countries is one way to avoid unrealistic expectations of international partners, and is considered a rather superficial—because time issues are relatively easy to track and manage—aspect of localization efforts. Awareness of time issues can be considered a feature of message pragmatics or cultural sensitivity. In this IWCA, however, references to time and negotiation of response expectations are treated as indications of understanding of the circumstances of international colleagues.

A majority of international workplace writing currently takes place in individuals' home offices, although writing location is changing with technology. Language choice in a sense is

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47 E. S. Browning, "Side by Side: Computer Chip Project Brings Rivals Together, But the Cultures Clash," *Wall Street Journal* 3 May 1994: A8.

48 Communication may become rushed even in writing, if one zone is just starting work while another zone is ending the business day.

the turf on which the written interaction must take place. For writing done in English by L1s for L2 readers, the effect of individuals' cultural understanding on writing processes is an important factor to evaluate to help people meet their organizational goals. Organizations which work with specific cultures or language groups may require localizing the IWCA to be more sensitive to linguistic and cultural differences.

Localizing the IWCA

To improve the specificity and sensitivity of the audit, the IWCA plan can be extended from its focus on what Hoft refers to as base or global variables to include cultural or local variables.[49] This extension can be thought of as adding modules to the IWCA; in practice, these modules are additional questions or lists of features, taken from contrastive rhetoric and case examples, to address specific communication expectations of different cultures and language groups. Imagine a data base—for example, the rudimentary one with which I constructed this prototype IWCA—in which the auditor maintains research and practical references, each labeled by country(ies) of observation or application, language(s) in which the example occurs or is relevant, possible feature category(ies), and, with time, severity rankings. This last category, severity, requires research into L2 readers' needs and expectations, and might improve the sensitivity and specificity of the IWCA. Severity rankings could be both global and local. Misspelled uncommon words may be worse than misspelled common words on a global scale, while different linguistic structural variations may be processed differently by language groups. For example, Chinese and Japanese speakers may be less easily sidetracked by subject-verb agreement errors than are German and French speakers; Arabic speakers typically use many coordinate clauses and may prefer that structure.[50]

These differences in L2 backgrounds strongly suggest that accommodating language groups, such as Romance or Asiatic languages, may promote more successful international communication. When a culture-specific module is needed, the data base can be searched for cultural items to add to the base IWCA. Modular units also can be country- or language group-based, depending on the needs of the organization. If the organization is seeking an IWCA to

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49 In medicine, a test which is highly specific to a disease will point to only that disease. A test may miss cases; the missed cases are called false negatives. A highly sensitive test will catch a high percentage of the cases of the disease, but may include cases in which the person does not have the disease after all, or false positives. An IWCA that misses instances of communication problems but does address real problems will be specific for those problems. An IWCA that catches many problems relative to a specific need will be sensitive to those problems. The problems of false positives and negatives relate to the reliability and validity.

50 Zev Bar-Lev, "Discourse Theory and Contrastive Rhetoric," *Discourse Processes* 9 (1986): 237-39.

help improve its communication with one or more international partners, an IWCA and subsequent training can be constructed to address the specific needs of the alliance. A simple example would be a Spanish language module, which would need adjustment for alliances with Mexico, Chile, Puerto Rico, or Spain on the cultural understanding and message pragmatics factors but might not require much if any change in addressing the translation and readability factor. Any localization module reflects document and culture conventions customary in the target language's or country's written communication. Literature relevant to language-specific localization modules—German, Japanese, and PRC Chinese—is outlined briefly below. In each module, since translation issues are critical for documents written in English for other language readers, the emphasis is on literature relevant to message pragmatics and cultural understanding.

Localizing for Germany

Even though English and German share many linguistic roots and much common vocabulary, business documents are structured differently in German than in U.S. English.[51] The rhetorical structure of German academic text, pointed out by Clyne and others, allows more embellishment and digression, and digression within a digression, than Anglo-Saxon "linear" rhetoric normally can tolerate.[52] The organization of linguistics and sociological texts written by English and German speakers, as judged by linearity, symmetry, hierarchy and continuity, as well as the position of definitions and advance organizers and the integration of data, led Clyne to suggest that the differences between the English and German texts may be promoted by the educational systems and by different intellectual styles and attitudes to knowledge and content, a combination of message pragmatics and cultural understanding.[53] The value of this culture knowledge is not to encourage the U.S.-writer to produce more convoluted text, but to be patient with Germanic style and apparent digressions. Since the use of verbs is strictly determined in German, attention to appropriate verb use in English can improve the readability of text for German L1 readers.

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51 Arthur H. Bell, W. Tracey Dillon, and Harald Becker, "German Memo and Letter Style," *JBTC* 9.2 (1995). Iris Varner, "Cultural Aspects of German and American Business Letters," *Journal of Language for International Business* 3.1 (1988).

52 Michael Clyne, "Discourse Structures and Discourse Expectations: Implications for Anglo-German Academic Communication in English," *Discourse Across Cultures: Strategies in World Englishes*. ed. Larry E. Smith (New York: Prentice-Hall, 1987).

53 Michael G. Clyne, "Cultural Differences in the Organization of Academic Texts: English and German," *Journal of Pragmatics* 11.2 (1987).

Older references, such as Hildebrandt's 1973 cultural survey of German and American difficulties in an international firm, are not as useful in the development of a German module for the IWCA, although this almost classic article could be used to spark discussion in a similarities and differences brainstorming session.[54] An effective IWCA must address the current needs of the workplace rather than focusing on older research which reflects the needs or beliefs of an earlier generation. Some linguistic features are persistent across time; some are not. For example, the prototype IWCA's focus on document structure and correctness or standard language use may well become obsolete as international organizations change their communication technology. Technology already available, such as videotapes to illustrate clothing designs instead of instructions written to accompany still photographs, could, when technology costs drop further, take the place of much of this concern with form.[55] More graphical display of data might be especially welcome in Japan, a second country for which I have begun to collect information to support localization of workplace writing.

Localizing for Japan

Perhaps because of their character-based language, Japanese tend to be acutely aware of figure and ground relationships, and have a word—*kagay*—that refers both to "shadow" and to "the space between objects."[56] This awareness of images may help them be receptive to graphical displays of information or may be a result of their training in interpreting graphics. In addition to using character scripts, Kana and Kan'ji, to write Japanese, organizing information from train time tables to quality control data in elaborate graphics is common in Japan. Therefore, a Japanese localization module would focus on document features such as inclusion of graphics, because graphics are repeatedly stressed as helpful devices for Japanese readers of

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54 Herbert Hildebrandt, "Communication Barriers between German Subsidiaries and Parent American Companies," *Michigan Business Review* 25.4 (1973).

55 Video tapes are used to replace extensive customer documentation for tasks such as PC-chip installation. I refer here to communication technology used for transfer within an organization rather than more broadly reaching communication. The cost of a video tape includes capital outlay for camera, play-back equipment, camera technicians, and modeling fees for clothing or any object involving a human interface. Decisions about level of communication and the cost often depend on which budget is tapped for materials, models, and labor costs.

56 Dale Keiger, "The Painter's Eye," *Johns Hopkins Magazine* Sep. 1996: 44.

English documents.[57] Graphics in documents are related to message pragmatics (it's polite to use them since the Japanese are used to them), translation (it's easier to figure out the text if there's a graphic too), and cultural understanding (it's an indication of the author's knowledge of the Japanese culture, that is, it's polite to use graphics since Japanese readers expect them). Note the overlap of these three categories, and the slightly different interpretations the presence or absence of graphics can take. Graphics are more common features in U.S.-English documents since the development of low-cost desktop publishing, although these graphics are not as sophisticated or detailed as those routinely produced in Japan.[58]

A second point falling equally between message pragmatics and cultural understanding is the inclusion of politeness strategies, like attention to honorifics, and to rhetorical strategies with which to say negative things politely.[59] For example, in the U.S. people tend to use first names to show friendly concern, often beginning a business relationship with the use of first names to establish a good atmosphere. In Japan, people prefer to use honorifics to maintain distance at the beginning of a business relationship; Japanese speakers are more comfortable with the use of honorifics in new relationships than are U.S.-English speakers and may use honorifics throughout the life of the relationship, depending on the domain ("in-group," "ritual," and "stranger" are the three primary domains in Japanese) to which the two parties belong.[60] The Japanese language, according to Yoshiko Matsumoto, has no socially unmarked sentences, so every exchange carries social information (either conventional or

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57 John R. Kohl, et al, "The Impact of Language and Culture on Technical Communication in Japan," *Technical Communication* 40.1 (1993).

Lombard, "Let's Get Visual: Revelations After Six Days with Japanese Customers."

John Mackin, "Surmounting the Barrier Between Japanese and English Technical Documents," *Technical Communication* 36.4 (1989).

Kyoto Matsui, "Document Design from a Japanese Perspective: Improving the Relationships Between Clients and Writers," *Technical Communication* 36.4 (1989).

58 Edward R. Tufte, *The Visual Display of Quantitative Information* (Cheshire: Graphics Press, 1983).

59 Joann T. Dennett, "Not to Say is Better Than to Say: How Rhetorical Structure Reflects Cultural Context in Japanese-English Technical Writing," *IEEE Transactions on Professional Communication* 31 (1988).

Keiko Ueda, "Sixteen Ways to Avoid Saying "No" in Japan," *Intercultural Encounters with Japan: Communication–Contact and Conflict*. eds. John C. Condon and Mitsuko Saito (Tokyo: The Simul Press, 1972). Keiko Ueda's 1972 article is interesting; while the research is certainly at least 25 years old, the Japanese language has remained constant in its lack of a true comparison to the American English "no."

60 Kyoka Hijirida and Muneo Yoshikawa. *Japanese Language and Culture for Business and Travel: A Text for Students and Travel Industry Managers (*Honolulu: U of Hawaii P, 1987) 320-321.

unconventional).[61] A feature of an IWCA localization for Japanese, then, would be a check for the use of titles and addressing strategies. In regards to negation, Japanese who speak and read English are aware of the language differences between Japanese and English regarding negation, assuredly more aware of this linguistic difference than are most U.S. business people.[62] However, U.S. writers can rhetorically strengthen their written communication through awareness of the multiplicity of negation possibilities in the Japanese rhetorical situation compared to the U.S.'s own rather limited approach to "no." Many sources focus on Japanese rhetorical strategies both in training and in the workplace.[63] The construction of a business letter is a classic example of workplace writing, a relatively easy genre to categorize because examples of letters are more available than internal documents.[64] The similarities and differences between Japanese and U.S. technical documents have been studied and clearly outlined by Japanese trained in both the U.S. and Japan.[65] Research such as the above would contribute to the development of a Japanese localization module in an IWCA plan.

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61 Yoshiko Matsumoto, "Politeness and Conversational Universals—Observations from Japanese," *Multilingua* 8 (1989), cited in Gabriele Kasper, "Linguistics Politeness: Current Research Issues," *Journal of Pragmatics* 14 (1990): 196-197.

62 David DeVoss, "Superstore Samurai," *American Way* 1 Apr. 1992: 56. Mr. Nakauchi, Japan's biggest retailer, urges his organization to study English for convenience. One reason: "In English 'You can say yes and no clearly. That is not the case with Japanese.' "

63 John Hinds, "Contrastive Rhetoric: Japanese and English," *Text* 3.2 (1983).

JoAnne D. Liebman, "Toward a New Contrastive Rhetoric: Differences Between Arabic and Japanese Rhetorical Instruction," *Journal of Second Language Writing* 1.2 (1992).

64 Ulla Connor, *A Contrastive Study of Persuasive Business Correspondence: American and Japanese*, Conference Proceedings, Houston, 1988.

Saburo Haneda and Hirosuke Shima, "Japanese Communication Behavior as Reflected in Letter Writing," *Journal of Business Communication* 19.1 (1982).

Susan Jenkins and John Hinds, "Business Letter Writing: English, French, and Japanese," *TESOL Quarterly* 21.2 (1987).

Betsy Stevens, "Management Communication Strategy in Case Assignments: The Double-Message Approach." *The Bulletin of the Association for Business Communication* 57.3 (1994).

65 Matsui, Document Design from a Japanese Perspective: Improving the Relationships Between Clients and Writers.

Yoshiaki Shinoda, "Pitfalls for Japanese Specialists in Technical Writing." *Journal of Technical Writing and Communication* 10.3 (1980).

Localizing for the People's Republic of China (PRC)

Even more challenging in the continuum of Pacific Rim communication are the needs of Chinese L1 speakers, especially those who first learned Chinese in the PRC.[66] Some linguistic issues in English L1 communication with Chinese and Japanese L1 speakers are similar, based on the differences between English and languages that share a common history of character representation rather than an alphabet system. However, the cultural issues for U.S.-PRC business interactions are different from those in Japan.[67] Business with Japan as a developed country is a fact of life. The Japanese know the global economy directly; over 10 million Japanese travel abroad annually.[68] Although trade with PRC China opened in 1978, only a tiny fraction of PRC population has yet to travel outside of China; in sharp contrast, in 1988, 90% of Japanese newlyweds honeymooned outside of Japan.[69]

Researchers are grappling with the challenge of communication with L1 Chinese speakers of many nationalities.[70] Even more challenging for U.S.-English L1 researchers is communication with the PRC Chinese, who were isolated by politics from 1949 to 1978.[71] This research provides stepping stones toward exploring document features, such as the types of persuasion and the arrangement of arguments, important to L1 Chinese-speakers or to PRC

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66 Despite the reopening of the PRC to trade in 1978, since 1949 PRC speakers have been and still remain restricted in their access to books, films, and recordings in English. Access to fax machines was restricted for many years in the PRC as the government tried to decide how to control access to information being faxed in and out of the country. Access to the Internet is the latest hot communication issue in the PRC.

67 Kathleen Krone, Mary Garrett, and Ling Chen, "Managerial Communication Practices in Chinese Factories: A Preliminary Investigation," *The Journal of Business Communication* 29.3 (1992).

68 Ohmae, Kenichi, "Managing in a Borderless World," *Harvard Business Review* May-Jun. (1989): 153.

69 Ohmae, "Managing in a Borderless World" 153.

70 Linda Beamer, "Teaching English Business Writing to Chinese-speaking Business Students," *Bulletin of the Association of Business Communication* 42.1 (1994).

Priscilla Chu and Olivia Tse, "The *Art of War* and Strategic Management," *Journal of Management Education* 16 (1992).

John Hinds, "Reader Versus Writer Responsibility: A New Typology," *Writing Across Languages: Analysis of L2 Text*, eds. Ulla Connor and Robert B. Kaplan (Reading: Addison-Wesley, 1987).

Joy Reid, "A Computer Text Analysis of Four Cohesion Devices in English Discourse by Native and Non-native Writers," *Journal of Second Language Writing* 1.2 (1992).

71 H. L. Chan, "Preparing Managers to Work in China," *Journal of Management Education* 16 (1992).

Lane Kelley and Oded Shenkar, eds. *International Business in China* (London: Routledge, 1993).

Carolyn Matalene, "Contrastive Rhetoric: An American Writing Teacher in China," *College English* 47.8 (1985).

Chinese in particular.[72] To explore the PRC localization option of the IWCA, an example of Hoft's international variables worksheet is presented for Chinese L1 speakers, focusing on PRC Chinese (Appendix 5). This worksheet can be used to begin creating IWCA items relevant to writing in English for Chinese L1 speakers.

The next chapter, Chapter Four, is an outline of the construction of the prototype IWCA instrument, based on the research just presented. To qualify for inclusion in the IWCA, text features must be both relevant to effective documents and measurable. Furthermore, keeping in mind the goal of improvement (e. g., individuals learning to write more effectively), it must be possible to determine the presence or absence of a critical document feature without extensive training.

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72 Andy Kirkpatrick, "Chinese Rhetoric: Methods of Argument," *Multilingua* 14.3 (1995).

CHAPTER FOUR—THE INTERNATIONAL WRITTEN COMMUNICATION AUDIT (IWCA) INSTRUMENT

> Now a method of action, a mode of response, intended to produce a certain result—that is, to enable the blacksmith to give a certain form to his hot iron, the physician to treat the patient so as to facilitate recovery, the scientific experimenter to draw a conclusion which will apply to other cases,—is by the nature of the case tentative, uncertain till tested by its results. The significance of this fact for the theory of truth will be discussed below. Here it is enough to note that notions, theories, systems, no matter how elaborate and self-consistent they are, must be regarded as hypotheses. They are to be accepted as bases of actions which test them, not as finalities. To perceive this fact is to abolish rigid dogmas from the world. It is to recognize that conceptions, theories and systems of thought are always open to development through use. It is to enforce the lesson that we must be on the lookout quite as much for indications to alter them as for opportunities to assert them. They are tools. As in the case of tools, their value resides not in themselves but in their capacity to work shown in the consequences of their use.[1]

The IWCA, outlined at the instrument level in this chapter, is an application designed to help organizations evaluate their performance in international communication. An IWCA must reflect L2 audiences' needs, so that organizations can assess the degree to which they meet L2 needs within the context of their international communication strategy. The IWCA instrument is designed to structure face-to-face interviews with key personnel and to guide evaluation of documents. The items of the IWCA, developed from the contrastive rhetoric and workplace literature explored in Chapter Three, are the basic units of document analysis.

Because workplace documents reflect the needs of the organization at many levels, the IWCA is a multilevel construction. The multiple levels of the IWCA reflect information gathered about the organization as well as its divisions, departments, individuals, and documents. These all contribute data which can be generalized though an audit. The audit data can be analyzed to represent a general picture of documents produced throughout the organization or further stratified to represent the general performance of different divisions. The accuracy and validity of the audit depends in turn on the sampling and analysis strategies, as described in Chapters Five and Six. This chapter focuses on items appropriate for different levels in the organization and how those items relate to an organization's need to assess its international communication.

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1 John Dewey, *Reconstruction in Philosophy* (Boston: Beacon, 1957) 143.

Levels of the Organization and the IWCA

Within an organization, different levels or groups have different needs, yet they depend on many of the same documents to help meet these needs. I have defined these levels as document, individual, group, and organization. Beginning at the document and individual levels, for example, let's assume that in 1996 an individual data assistant produces a document to meet a specific task, such as specifying a series of database items. At the group or department level, that same document helps meet the goals of a larger specific task for the data assistant's working group or department. The larger task is to build a data-base shared by ten different sites in six different countries; five database managers and eight data assistants contribute item specifications to the overall design. At the division (also group) level, the document is part of a project to consolidate research conducted in over twenty countries. At the organization level, the document contributes to a new global product launch planned simultaneously in the United States, the European Community, and Saudi Arabia in the year 2000. Not surprisingly, the same 1996 document plays many different roles and contributes in more than one way to the year-2000 global product.

To meet its goals, the global organization depends on people from different linguistic backgrounds being able to process documents effectively. "Internationalized" documents can help improve workplace communication. Conversely, overly localized or ethnocentric documents can generate time-consuming questions that introduce errors, delays, and misunderstandings. The IWCA is designed to find evidence of ethnocentric writing by assessing documents for features relevant to L2 readers. Documents with few positive features related to L2 readers' needs are assumed to indicate a more ethnocentric writing approach than documents with evidence of many positive features to indicate a more polycentric or geocentric approach to writing.

Analysis of workplace writing cannot, as the database specification scenario indicates, focus only on the document. The interpretation of documents and the evaluation of their alignment with the organization's international strategies requires that the document remain connected to the groups that it represents. The inclusion of organizational levels, represented in the prototype instrument by four levels in this chapter, provides information to evaluate the alignment of the writing in different levels with the organization's international strategies.

For an audit to be representative, all key levels of an organization should be interviewed and assessed. Assume that a given organization has four key levels: the organization itself, divisions/departments/groups, individuals, and documents. For the first three levels, the

informants are people in the organization.[2] At the fourth level, the informant is the auditor, who generates responses by analyzing or "interviewing" the documents with the criteria and items that comprise the basic document-level IWCA. The four key levels, their representative informants, and primary foci of the IWCA are presented in Table 4.1.

Table 4.1. Four Key Levels, Informants, and Focus of Audit

Level	Informant	Focus of Audit
Organization	CEO	Organization-focused to determine strategic direction
Division/Department/Group	Head of Division/Department/Group	Division/group-focused to determine long-term goals
Individual	Individual Worker	Individual-focused to determine immediate goals
Document	Auditor	Document-focused to determine presence or absence of L2-relevant features

The IWCA can address more or fewer levels than the four shown in Table 4.1. The level represented by "Division/Department/Group," for example, may be a single group of workers under the leadership of the organization's CEO, a matrix of interwoven groups, or any number of sub-levels in a larger organizational hierarchy. These four levels of the organization are described in the prototype IWCA outlined in Appendices 1-4. The IWCA sampling strategy, discussed in Chapter Five, can include more subdivisions in the overall sampling hierarchy or adapt to a flatter hierarchy or a matrix organization. The IWCA items are designed to elicit information to describe each level (e. g., document, group) and to assess the presence of document features relevant to L2 readers.

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2 The number and stacking, or nesting, of divisions, departments, and groups within the organizational hierarchy will vary from organization to organization. Although this example is only shown to four levels, the stratification of the sampling frame and data analysis can be adjusted to reflect the structure of individual organizations. In practice, the divisions/departments/groups level might need adjustment to reflect multiple distinct layers of an individual organization. For simplicity, in this discussion, "divisions/departments/groups" is treated as one level.

As illustrated in Table 4.2, the document feature categories—message pragmatics, translation and readability, and cultural understanding—are each represented in the prototype IWCA instrument. Additionally, a fourth category ("Background") guides the collection of descriptive information. All four levels of the organization are examined from the perspective of each of the four categories of the IWCA audit indicated by the rows in Table 4.2.

Table 4.2. Key Levels of Organization by IWCA Categories

	Key Levels			
IWCA Categories	**1 Organization**	**2 Group**	**3 Individual**	**4 Document**
Background	International strategic focus	International involvement	International work patterns	International transmission
Message Pragmatics	Control of international contact	Control of international contact	Awareness of international contact	Presence of politeness strategies
Translation & Readability	Translation support	Translation support & document control	Translation awareness	Word choice & usage
Cultural Understanding	Cultural training	Cultural training	Cultural awareness	Cultural references

Each level (column) of the organization shown in Table 4.2 can be thought of as a subaudits. Although some organizations might need more levels in an audit to adequately represent their work-flow structure, other organizations would need less differentiation than the four subaudits provide.

As noted in Chapter Three, the IWCA categories, shown by rows in Table 4.2, tend to overlap. That is, some document features related to message pragmatics can be interpreted as contributing to translation or to cultural understanding. Consequently, some of the items in the prototype instrument, described in Appendices 1–4, fit in more than one category, and might

contribute to more than one composite score in analysis.[3] However, the items are grouped by category so that the interview can progress through related topics as shown in the appendices, moving from relatively easy items to more technical items and then ending with the more open-ended cultural items. At each level, with each informant, the opening section of the IWCA prototype is a descriptive background section. This information will help to determine the penetration of the organization's global strategy across levels and to produce a general description of the different levels.

Background

The descriptive information collected at the organization and division/department levels ranges across a variety of topics. Description of the organization includes the number of international sites and the international presence as indicated by personnel, sales volume, or market share. In addition, the mission statement is a useful descriptive item to obtain from the organization; the mission statement is important to the IWCA analysis because the overall goal of the company should be articulated in this document. The mission statement can be compared to the organization's communication strategies as a first step in checking the alignment of the organization's practices with its global strategy. The description of the group level is similar to that of the organization, based on information about the general range of international work. This indicates the opportunity for experience or exposure of the group to international contact.

The background information elicited from individuals focuses on work patterns and the volume of work, both national and international, that individuals routinely process. These data, which can be used to generate organization-level estimates, will allow the organization to assess the volume of international communication relative to national communication. It should be possible to determine if an area of the organization needs attention because either a great deal of or too little international work being done.

At the document level, the background description is of the physical document and the genre it represents. Font size and type (serif or sans serif), physical medium and method of international transmission, and the length of the document are noted and processed as descriptive information to categorize the document production of the organization. The length of the document, while descriptive of the physical document, overlaps into the realm of message pragmatics and translation, since the length of a message is a pragmatic feature.

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3 Plans for the initial item analyses are briefly noted in italics below each item in the Appendices.

Message pragmatics

Message pragmatics at the organization and division/department levels refers primarily to logistics such as the common methods of transmission (e. g., e-mail, fax, paper copy, teleconference, courier), the amount and kind of international travel, and who is allowed to travel or to make decisions about communication (e. g., place an overseas call). This information, analyzed and reported as either a descriptive summary or as counts and proportions of observed features, contributes to the assessment of the organization's international communication strategy.

Message pragmatics at the individual level refers to actions such as the use and timing of voice contact around document delivery and other strategies that accommodate an L2 reader. Timing of telephone contact or follow-up is critical in international business. Second-language speakers, in particular those from low context cultures such as Germany and Switzerland or those whose aural English comprehension is limited, tend to prefer receiving a written summary before a telephone contact, and to have time to review documents before discussion. Many people, regardless of linguistic background, like to be prepared for a meeting or conference; however, in international communication, for many issues the question is one of degree. The linguistic demands of a telephone conversation can be much higher for L2 speakers than for L1 speakers.[4] Additional message pragmatics at the individual level include knowing the time zones within which the company communicates and having follow-up strategies for documents sent to different time zones.

Message pragmatics at the document level refers to specific features that should help L2 readers process documents and that indicate respect for L2 readers' needs. Some of the pragmatic features that are part of the document-level IWCA include:

- author/reader focus (e. g., use of pronouns, references to the reader's situation)
- arrangement (e. g., by chronology or by perceived importance)
- "logical" structure (e. g., strict, moderate, slight parallelism)
- graphics (e. g., present or absent)
- evidence of polite language (e. g., "please," "thank you," "would you," "could you")

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4 Raymonde Carroll, *Cultural Misunderstandings: The French-American Experience*, trans. Carol Volk, (Chicago: The U of Chicago P, 1988). As recently as six years ago, international business calls were still tightly controlled and restricted in Switzerland, a country that meters its domestic phone service in five second units.

The author/reader focus category includes the use of passive voice, observed in an accounting firm in the U.S. by John Hagge and Charles Kostelnick,[5] and attempts by the author through the use of pronouns to bring the reader more directly into the document, as noted by Thomas Huckin in an article addressing readability for L1 audiences.[6] For example, according to Susan Jenkins and John Hinds, American English business letter writing is reader-oriented and French business letter-writing is writer-oriented, while Japanese business letter writing is non-person-oriented, reflecting an overall tendency to frame communication in terms of the relationships between people.[7] Arrangement refers to the order of information; documents may or may not have a discernible or forecasted order.[8] Preference for arrangement can vary at the sentence-level; for example, Hinds noted that in Japanese sentences, the order of action is Subject-Object-Verb, while in Chinese the order is Subject-Verb-Object.[9] Arrangement and logical structuring are closely related, and influence reception of text.[10] Structural features such as linearity, symmetry, hierarchy and continuity in addition to the position of definitions and advance organizers and the integration of data have been examined in academic documents by Michael Clyne.[11] Attention to these features in workplace documents is one method of analysis for the IWCA. The presence or absence of graphics is one of the easier pragmatic features to measure. In general, graphics are useful in documents because people from some cultures, such as the Japanese, expect to get part of their information from graphics and because graphics are often more readily interpreted than the same information presented in text.[12] This ease of interpretation holds true for L1 readers.[13]

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5 John Hagge and Charles Kostelnick, "Linguistic Politeness in Professional Prose: A Discourse Analysis of Auditor's Suggestion Letters, with Implications for Business Communication Pedagogy," *Written Communication* 6.3 (1989).

6 Thomas N. Huckin, "A Cognitive Approach to Readability," *New Essays in Technical and Scientific Communication*, eds. Paul V. Anderson, R. John Brockmann, and Carolyn R. Miller (Farmingdale: Baywood, 1983).

7 Susan Jenkins and John Hinds, "Business Letter Writing: English, French, and Japanese," *TESOL Quarterly* 21.2 (1987): 327.

8 Carolyn Matalene, "Contrastive Rhetoric: An American Writing Teacher in China," *College English* 47.8 (1985).

9 John Hinds, "Contrastive Rhetoric: Japanese and English," *Text* 3.2 (1983): 186.

10 Eric Abelen, Gisela Redecker, and Sandra A. Thompson, "The Rhetorical Structure of US-American and Dutch Fund-raising Letters," *Text* 13.3 (1993).

John Mackin, "Surmounting the Barrier Between Japanese and English Technical Documents," *Technical Communication* 36.4 (1989).

11 Michael G. Clyne, "Cultural Differences in the Organization of Academic Texts: English and German," *Journal of Pragmatics* 11.2 (1987).

However, the reading process is generally slower for L2 than for L1 readers; therefore document features that can affect reading speed are particularly important. Politeness, as discussed in Chapter Three, is a category that bridges both message pragmatics and cultural understanding. Documents that show some evidence of politeness or respect, whether concretely through politeness markers or through more subtle indications (e. g., use of graphics for clarity, attention to mechanics as evidenced by grammar and usage) should be more effective in a competitive international market.

These logistical and politeness issues are critical to the smooth transfer—transmission and reception—of information in a local-to-local or regional context, and require even more attention in international settings because of the greater possibility of message to being misunderstood. As noted in Chapter Three, because the quality of a document can be seen as an indication of a writer's regard for the reader, message pragmatics and the issues of translation and readability are closely related in the interpretations that can be placed on the presence or absence of some document features.

Translation and readability

At the organization and division levels, awareness of translation and readability issues is signaled by the resources allocated to translation, language training, and control of document production. Concrete examples of document control include the existence and use of style manuals for internal and client documents and the use of controlled dictionaries.

At the individual level, the IWCA translation and readability items focus on the individual's linguistic background, notably on the individual's knowledge of second or foreign languages. Whether or not a writer knows the same languages spoken by colleagues applies to both translation and to cultural understanding issues.[14] While some documents are written to be translated by professional translators, the majority of workplace documents are written for

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12 William Horton, "The Almost Universal Language: Graphics for International Documents," *Technical Communication* 40.4 (1993).

Fred Klein, "A Multilingual Market: Exporting to Europe," *Technical Communication* 36.2 (1989).

Catherine Lombard, "Let's Get Visual: Revelations After Six Days with Japanese Customers," *Technical Communication* 39.4 (1992).

Herbert Vogt, *Graphic Ways to Eliminate Problems Associated with Translating Technical Documentation*: Proceedings, Society for Technical Communication, 1986.

13 Phillipa J. Benson, "Writing Visually: Design Considerations in Technical Publications," *Technical Communications* 32.4 (1985).

14 At times, the writers will not even know which languages the L2 audience speaks. In a group of 35 Europeans, there might be 11 different first languages represented, including several varieties of English.

translation by individual L2s who are not professional translators.[15] Therefore, individual L1 writers need to be aware of translation issues in the international setting.

At the document level, the IWCA assesses the following features related to translation and readability:

- length of documents (e. g., several paragraphs, one to two pages, more than two pages)
- length of paragraphs relative to genre/medium (e. g., paragraphs in e-mail need to be shorter than paragraphs in paper-based texts).
- length of sentences (longer sentences are generally harder to understand)
- number of topics in a single communication (more topics tend to be more confusing)
- use of grammar (count the number of non-standard features—the higher the number of non-standard features, the more time translation will take)
- range of vocabulary (includes the use of metaphors, "elegant variation" and synonym problems)
- spelling (% words misspelled or mistyped)

The length of documents generally affects the time needed for translation; the physical length, while occasionally daunting, is not as important as the word count.[16] When documents are in electronic form, word counts (both total words used and distinct words) are easy to obtain.[17] The readability of e-mail can be an issue regardless of culture; paragraph length in e-mail versus standard documents is an experimental measure for within-organization use in the IWCA. Sentence length has been linked to readability and ease of translation by a number of researchers.[18] Longer sentences tend to be more complex in both grammar and content, and

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15 Even skilled professional translators hate working with poor text.

16 Stacey Sanderlin, "Preparing Instruction Manuals for Non-English Readers," *Technical Communication* 35.2 (1988).

Documents that follow readability standards may look longer because of added white space. Recent work in industry shows a word reduction of 25 to 30% yet a physically longer document when using a plainer style of English "'Plain English' Documents May Not Mean Less Work for Printers," *The Wall Street Journal* 6 Oct. 1996: A1.

17 Carol Leininger, *Using English as an International Language in Business*. Unpublished presentation, Midwest Regional ABC Conference, Cedar Rapids, IA, 1993.

18 Huckin, "A Cognitive Approach to Readability."

C. K. Ogden, *The System of Basic English* 1st ed (New York: Harcourt, 1934).

Sanderlin, "Preparing Instruction Manuals for Non-English Readers."

Thomas, Margaret, et al, "Learning to use Simplified English: A Preliminary Study," *Technical Communication* 39.1 (1992).

can pose problems for L2 readers. Another source of confusion is the number of topics in a communication. The "piggy-backing" of topics requires that the reader re-focus on each new topic, which can require shifting perspective in translation.[19] Non-standard features, according to Paul Meara, are problematic (i. e., reduce reading speed and comprehension) for all readers, but have an almost exponential effect on L2s' reading speed compared to L1s.[20] Range of vocabulary, the number of words as well as the complexity of the words, affects reading speed and comprehension as well.[21] At a more subtle level are issues of the use of synonyms, "elegant variations," and metaphors (e. g., in Spanish, machines "walk" while in English they "run") that may not translate quickly.[22] Misspellings, as noted in Appendix 5, are non-standard variations, and can be misunderstood or misinterpreted in a number of ways.[23]

This category, translation and readability, is more mechanically defined than are either message pragmatics or cultural understanding. Translation and readability features should therefore be among the easiest to measure reliably, and also the easiest features for writers to learn to recognize and to improve in workplace intervention and training. Cultural understanding issues are, by contrast, more difficult to recognize in documents, although easy to talk about in general terms. As seen in the second brief scenario in Chapter One, the Turkish muffin fiasco, cultural understanding depends on a broad knowledge base that is in part linguistic and in part experiential.

Cultural understanding

The cultural understanding section of the IWCA is most likely to be affected by the organization's needs for localization, internationalization, or globalization. That is, the specific document features that make the most difference to an organization's international communication vary depending on the countries involved. Cultural understanding at the organization or division level, then, is reflected in the IWCA translation items, and also in the

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19 Leininger, *Using English as an International Language in Business.*

20 Paul Meara, "Word Recognition in Foreign Languages," *Reading for Professional Purposes: Studies and Practices in Native and Foreign Languages.* eds. A. K. Pugh and J. M. Ulijn (London: Heinemann Educational Books, 1984).

21 B. Gringas, "Simplified English in Maintenance Manuals," *Technical Communication* 34 (1987).

22 James H. Ward, "Editing in a Bilingual, Bicultural Context," *Journal of Technical Writing and Communication* 18.3 (1988) 224.

23 Jean Datta, "Addressing a Worldwide Readership Through the Filter of Translation," *IEEE Transactions on Professional Communication* 34 (1991).

Deanna Hammond, "Meeting the Need for High-Quality Technical Translations Today," *Technical Communication* 36 (1989).

Ward, "Editing in a Bilingual, Bicultural Context."

international training items for different levels of the organization. Some organizations may offer international training or specific language training for managers and technical workers going to target country posts, but not offer language or intercultural training to host country workers engaged in international collaboration. The level of training offered is one indication of the organization's global strategy (e. g., polycentric and geocentric organizations are more likely to offer training to expatriate managers and employees than are ethnocentric organizations).

Individuals' cultural understanding is difficult to ascertain in the IWCA. However, at the individual level, knowledge of holidays not shared by all affiliates and of the languages spoken in other divisions shows rudimentary cultural understanding that can help communication.[24] Knowing the sports played by the affiliates may indicate cultural knowledge of international colleagues, and might help determine what sports metaphors might be appropriate, if any. This section is difficult to construct; the category seems intrusive in practice. I have difficulty imagining asking someone a cultural understanding item such as "What side of the road do your colleagues drive on?" or "Where on this map is Taiwan?"[25] Some of the cultural features included in the document level IWCA items are:

- cultural references (e. g., appropriate or inappropriate)
- graphics (e. g., offensive or evocative)
- logic structure (e. g., inductive or deductive)
- slang (e. g., "this document is nubbly")
- acronyms (e. g., "laser," "COB," "btw")

Inappropriate cultural references include comments about religion, race, and sexuality.[26] Graphics as well as text can pose problems in religious connotation. Islamic cultures may take offense at graphic images considered benign in cultures from the Christian tradition, for example, for some interpretations of Islamic code prohibit the graphic display of

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24 A serious problem with the cultural understanding section of the IWCA, more than the other sections, is that the IWCA is limited by the cultural knowledge and biases of its developer. The IWCA should evolve if it is used more than once, or if more than one person contributes to its development and refinement as a workplace assessment tool.

25 A speaker recently asked this question of an audience in the form "Who knows where on the map Taiwan is located?" The entire audience was supposed to keep their eyes shut, so that no one would be embarrassed, but the speaker noted their responses of geographic certainty.

26 John Kirkman, "What English Should We Teach for International Technical Communication?" *Journal of Technical Writing and Communication* 22 (1992).

such things as the human image. The choice of logical structure or argument presentation varies for different language groups; authors such as Clyne and John Mackin ascribe the different logical patterns to educational differences in Germany, the U.S., and Japan.[27] Acronyms generally are easier to uncover in a text than are slang expressions, although some acronyms are in such common use that they are not immediately apparent to an L1 writer.[28] "Laser" is an acronym, for example, but one not often identified by U.S.-speakers. Generally, acronyms can't be translated; for example, the acronyms SIDA and AIDS refer to the same syndrome in Europe. The Chinese have developed different words for acronyms in Taiwan and the PRC to deal with non-translatability.[29] Translation of acronyms is problematic in most languages; acronyms are often imported wholesale and no longer function as acronyms with a sharply defined meaning.

Again, because culture resists abstract definition, certainly relative to utilitarian forms of discourse believed to facilitate workplace communication, the cultural understanding section of the IWCA requires more review relative to an individual organization's needs than do either the message pragmatics or translation and readability sections. Creating the cultural understanding items of the IWCA requires understanding the global strategy and the communication needs of the organization, as discussed in Chapter Two.

Administrative Phases of the IWCA

In some cases, the IWCA might be administered in two phases to determine the scope of the IWCA and to facilitate tailoring the inclusion of items to the needs of the organization. The first phase focuses on the strategic goals of the organization and leads to the development of a customized IWCA instrument, sampling strategy, and administration plan. The second phase includes group, individual, and document selection, data collection, and document analysis. Throughout the study, the auditor should involve the organization in the IWCA's planning, data collection, and analysis process. In the first phase, collaboration between the auditor and organization is particularly critical to appropriately adapt the overall plan of the

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27 Clyne, "Cultural Differences in the Organization of Academic Texts: English and German." Mackin, "Surmounting the Barrier Between Japanese and English Technical Documents."

28 Fred Klein, ed. *Translation in Technical Communication.* Washington, DC: Society for Technical Communication, 1988.

29 Chengzhao Lou, "Translating English Scientific and Technical Terms into Chinese: Comparing the Practice in Mainland China and Taiwan," *IEEE Transactions in Professional Communication* 35.1 (1991): 1992.

IWCA to the needs of the organization.[30] For example, an IWCA, as discussed earlier in this chapter, can represent more or fewer levels of the organization than the four described in Tables 4.1–4.2. However, the levels of representation need to be chosen before the data are collected. In the first phase of the IWCA, the auditor and the organization decide on the number of levels required for the analysis to adequately reflect the organization; they can then adapt the design of the IWCA sampling frame to include more subdivisions or to reflect a different organizational structure, as discussed in more detail in Chapter Five. The number of levels in the sampling frame and the kinds of generalizations that the organization finds useful also affect the plans for data analysis in phase two, and are discussed in Chapter Six.

30 The organization, if strategically misaligned as discussed in Chapter Two, might need to concentrate on global strategy over conducting an IWCA.

CHAPTER FIVE—AUDIT SAMPLING AND DATA COLLECTION PLANS

> "Try the biscuits," she says. "*Spekulaas*. I baked them myself. It has taken me an entire lifetime to find a way to take them out of the mould without ruining the pattern." . . . "I cheat a little," she says. "For example, this one here. The mould is a married couple. It's quite difficult to get the eyes right. That's the trouble with very dry pastry dough. So I use a knitting needle once they're out of the mould and lying on the table. So it's not the original design, but close to it. Something similar takes place in a company. Then it's called 'good accounting practice.' It's a flexible term that covers what the auditors will accept."[1]

What the auditors will accept depends in part on the goals of the audit and the needs of the company. The design of conventional audits, and the design of the IWCA, can be modified (without ruining the pattern) from organization to organization to accommodate different goals and needs. Accommodation involves considering myriad issues, both statistical and logistical, in constructing an IWCA for an individual organization.

In the previous chapter, I outlined a prototype IWCA instrument. In this chapter, I outline a prototype IWCA sampling hierarchy and its attendant analysis weighting strategy. Sampling and the application of weighting to the observed data allow auditors to make statistically reliable estimates of the degree to which selected features are present in an organization's documents. Using analysis weights allows computed estimates to reflect, proportionately, the contribution made by individual documents relative to the number of documents in the organization as a whole. Weighting the data also allows estimation of the number of documents produced within an organization, providing additional information for the organization. This chapter discusses the advantages and disadvantages of statistical sampling, the development of a sampling strategy, and an outline of the mechanics of sampling and data collection in the prototype IWCA.

Advantages and Disadvantages of Statistical Sampling in an IWCA

If audit sampling is statistical, the results of the audit analysis can be extended to a larger population of objects than those studied. If sampling is non-statistical, the audit represents only the works analyzed, and cannot reliably be generalized beyond the sampled documents to represent the organization's documents or writing performance as a whole. Sample selection, if one follows an inferential statistical model, determines the confidence with

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1 Peter Høeg, *Miss Smilla's Feeling for Snow* trans. F. David (London: Harvill, Harper Collins, 1993) 109-110.

which results can be generalized.[2] In this study, classic inferential tests, such as t-tests or chi-squares, are not planned; however, estimates created from a sample of data are in a sense inferential tests, allowing the generalization, or inference, to the larger organization from a subset of the organization.[3] Statistical sampling tends to be more costly and time consuming, yet has distinct quality advantages over non-statistical sampling.

Conceptually, statistical sampling differs from non-statistical sampling in that sample reliability can be calculated only when statistical sampling is used. Knowing the sample reliability allows knowledgeable extension, as described above, of the sampled data. Practical advantages of statistical compared to non-statistical sampling in any audit include the following:

- better documentation of the audit process
- more objective and defensible audit results
- better basis from which to offer suggestions to clients
- less risk of overauditing or underauditing
- greater confidence in the reception of results

If any major action is predicated upon the results of the IWCA, statistical sampling, being more reliably representative of the workplace, is the more appropriate model to use in planning and conducting the IWCA. Statistical sampling can approach, theoretically, a full census of data in terms of the advantages just listed. However, the degree to which the sample approximates the total population being estimated depends both on statistical issues related to the definition of the frame and the selection of units, and on logistical issues related to the information needs and funding of the organization.

Traditionally, statistical sampling and estimation are used for three primary reasons:

- to save time and money over taking a full census
- to avoid destroying an entire population when quality assurance would involve destructive testing (e. g., testing the lifetime of light bulbs)

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2 William G. Cochran, *Sampling Techniques* (New York: John Wiley, 1977).

Morris H. Hansen, William N. Hurwitz, and William G. Madow, *Sample Survey Methods and Theory: Volume I Methods and Applications*, Vol. 1 (New York: John Wiley, 1953).

Leslie Kish, *Survey Sampling* (New York: John Wiley, 1965).

3 If one does not accept an inferential model, statistical tests are wasted effort. However, without following a statistically valid sampling plan, most statistical tests are still wasted effort, since one of the primary assumptions underlying the model of inferential testing is violated.

- to project with some degree of confidence from a current situation into a future similar situation

In document analysis, destructive testing is not a factor. However, both control of costs and prediction are of interest, and as a result, sampling and statistical estimates are frequently used.

Generally, for cost reasons, sampling individuals and documents is more desirable than taking a full census of the organization unless the numbers of workers and documents involved are extremely small.[4] In a small organization with limited international contact, one could quickly audit an entire day's or even a week's production of international documents, whereas in a large organization, with many divisions that specialize in international projects, one day's document production could approach thousands of documents. Audit costs and quality, as well as the speed with which the audit can be conducted and reported, will vary depending on the number of people interviewed and documents closely analyzed.

Cost often functions as the determining point in the inflexible outcome triangle of cost, quality, and speed in which, invariably, no more than two of the three most preferred states (low cost, high quality, and high speed) are possible at a time.[5] The three "best-possible" combinations of the outcome triangle are:

- low cost, high quality, low speed
- low cost, high speed, low quality
- high speed, high quality, high cost

Other less desirable combinations, such as high cost, low speed, and low quality, exist; the three optimal combinations above are those that organizations can realistically strive to meet.[6] Low cost, high quality, and high speed is an academic possibility but remains an unrealistic goal for data collection and analysis. Increasing speed, for example, can mean adding more staff, authorizing over-time hours, or employing more qualified workers. Lowering cost can mean cutting corners either in the volume of data collected or in the number

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4 In some conventional communication audits that rely on opinion surveys, auditors survey all workers to prevent individuals from being recognized in the reported analysis [Seymour Hamilton, *A Communication Audit Handbook: Helping Organizations Communicate* (New York: Longman, 1987)]. Complete census information is easier to analyze, since no stratification or analysis weighting is needed to create estimates.

5 William S. Calvert and J. Meimei Ma, *Concepts and Case Studies in Data Management* (Cary: SAS Institute, 1996) 11.

6 Imagine the triangle with a fixed perimeter. As you try to lengthen one leg—to improve quality, for example—the other legs get shorter. This may not be inflexible as much as zero-sum—there are only so many resources; they are taken up in one place and not available in another place.

of checks and balances built into the data analysis. Increasing quality can involve collecting more data, conducting more in-depth analyses, or, similar to the speed example, adding highly qualified personnel to the audit.

In addition, the number of people and documents interviewed and closely analyzed influence the quality, both in the accuracy and the statistical reliability of the quantitative IWCA estimates and their subsequent usefulness as measures of prediction. Evaluation of the workplace documents is assumed to indicate the performance of the organization or segments of the organization. An assumption about performance, laid out in Chapter Two, is that without intervention, overall performance can be predicted to stay constant or change slowly. An organization would assess the results of the IWCA to decide if its international communication is adequate or should be changed. Therefore, the reliability of the IWCA is critical when an organization plans to use audit results to change policy or to decide on intervention such as training or employee retention. Reliability may be slightly less critical if the organization is only establishing a baseline (benchmarking) or checking on training. In addition to constructing the IWCA instrument to be sensitive to important features in documents written for L2 readers, the quality of the IWCA evaluation can be controlled through careful development of the sampling frame. The sampling frame and the criteria for estimates' reliability (measured by the standard errors of the estimates being calculated) are developed to avoid over-sampling or under-sampling which helps to contain costs and maintain quality in data collection.

Constructing the sampling frame is one of the logistical issues necessary to both the statistical and the non-statistical audit sampling plans, since the frame from which either statistical or non-statistical samples are drawn is constructed as a judgment choice. Judgment sampling, sometimes called "purposive sampling" is non-random sampling, inherently biased by the judgment of the sampler. The sampling frame reflects the universe of all possible documents and workers to be represented by the information obtained through the IWCA. In an organization, all divisions and workers at a given time can be known, although not all workers may be available at any one time. All documents are theoretically, but not practically, possible to assess. The judgment in the IWCA frame construction, then, comes from the choice of how many levels to surface, which documents will be represented, what time interval will be included, and how the documents can be identified for selection in the IWCA. The frame, reflecting the differences in each organization's structure and activities, will be different in each organization examined. Information to use in constructing an IWCA sampling plan includes:

- the number and location of international contacts,
- the number of people in the organization (or department) being studied,

- the number of people engaged in international work,
- the time interval which the audit covers,
- the kind of work being done by an organization,
- the type of documents produced for international use,
- the number of total documents produced, and
- the types of documents to be audited.

Knowing the number and location of international contacts helps the auditor decide whether to use a localization, internationalization, or globalization approach in choosing items to add or exclude from the basic IWCA items. For example, an organization that works primarily with one country or language group would profit more from a localization than a strictly international approach in an IWCA. In this case, if the main target country were Taiwan, and the majority of individuals in the non-U.S. branch of the alliance were Taiwanese, items related to Taiwanese culture and the Taiwanese use of English would be included in the IWCA assessment (e. g., documents would be examined for appropriate references to China, clearly separating Taiwan from the PRC, and the use of acronyms examined). Conversely, an organization with a number of colleagues in different countries or with a number of languages within one country would choose an internationalization approach, represented by the base IWCA. An organization with a broad base of operations might be interested in an IWCA that concentrates on globalization. This focus would suggest an IWCA with strict scoring on cultural references and on translation and readability issues to highlight features which affect documents read by an extremely wide range of people.[7]

The type of document of most importance to the organization is another issue to consider in the construction of the sampling frame. An organization's work focus and product flow influences the kinds of documents produced and their relative importance. For an organization whose technical designs are produced by a number of countries, technical design specifications may the most important documents in international use, even though they may represent a small proportion of the documents any one worker writes in a given time interval. Electronic mail, technical instructions, letters, memos, and technical reports are typical document genre to examine in a general IWCA. Some types or genre of document with more

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7 Localization, internationalization, and globalization start to sound similar to conventional L1-L1 business communication strategies that focus on the size of the audience as an indication of the tone to use in the message. When the message is personal or to one person, the tone can be tailored to the situation. When the "To:" list is larger, the message is more formal. When the "To:" and "cc:" list is very large, the message is very formal and constrained.

specific and specialized content, such as contracts or other legal documents, require special handling and examination, since the education of workers who write and analyze these documents is highly specialized and the nature of the documents largely pre-ordained by legal requirements, which differ from country to country. In fact, unless the organization being studied specialized in legal issues and had many workers writing international legal documents, an IWCA focusing on the needs of L2 readers would have little scope, since even in large companies international contracts are handled by a very small number of employees. Language does cause problems and misunderstandings in international contracts, but these problems seem to be as much legal as linguistic.

A brief exploration of several types of statistical sampling illustrates how organizations might adapt an audit sampling plan to different scenarios, depending on need. For example, in the simplest case, simple random sampling might be used to select a sample size of **n** individuals from **N** total employees in one organization, all of whom worked in the same undifferentiated group.[8] All the international documents produced on a single day by those **n** individuals could be collected and examined. These documents would represent all the international work done by the organization as a whole, irrespective of department or specialty.

Another organization might have from two to two hundred divisions, departments or groups involved in some way in international communication, producing hundreds of documents a day. For reasons of cost and efficiency, the second organization might want only a subset of departments to participate in an IWCA. In this case, a form of stratified or proportional sampling could be a better option than simple random sampling of employees across the organization, because with proportional sampling the performance of groups within the organization as well as the performance of the organization as a whole could be estimated. The auditor would select **i** departments from the total **I** departments possible; from those **i** departments, **n** individuals would be selected. From each $\mathbf{n_i}$ of the **n** individuals, **r** of the $\mathbf{R_{ni}}$ total documents individual $\mathbf{n_i}$ produced would be sampled.

This stratification, shown in Table 5.1, combined with careful bookkeeping and some algebra, allows the creation of estimates from a subset of data from **n** individuals to represent more than the **n** individuals sampled. The organization can then make projections or generalizations about both the performance of the different departments sampled and about the performance of the organization as a whole.

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8 As a brief note on terminology: in statistical notation conventions, capital letters represent the larger group or frame and small letters represent the sample selected from a larger group; n and N are frequently used to represent individuals.

Table 5.1. The Sampling Frame, Represented by I, N, and R, and the Sample, Represented by i, n, and r

	Department	Individual	Document
Frame	I	N	R
Sample	i	n_i	r_{ni}

More concretely, if person(n_i) produces 100 documents in a week (this time can be set to any interval the organization wishes to examine) and six are sampled, then those six documents are being asked to represent the 100 documents produced by person(n_i) during that time period. In addition, person(n_i) represents the performance of department($_i$) together with any other members of department($_i$) sampled. The performance of department($_i$) in combination with other sampled departments represents the performance of the organization as a whole. This is the same hierarchy as in the overall organization, outlined in the sampling frame, and shows the extent to which the IWCA can represent the documents produced within an organization that has many parts.

Starting from this vantage point, then, by applying statistical sampling as part of its data collection effort, an organization can estimate the number of documents it produces and the number which show the presence or absence of selected features, and thereby produce an estimate of performance on selected issues. The issues most relevant for an organization to assess depend upon the organization's needs.

Development of the Sampling Frame

Since organizations have different needs, a well-designed audit plan must be adaptable. Adaptation refers to the ability to use the audit to target key divisions and L2 needs, and reflects the sampling strategy used, the customization of the audit to the organization's specific L2 audiences, and the ability to contain costs of the audit in proportion to the expected benefits of the information obtained. These adjustment issues represent judgments made by the auditor and the organization as well as specific design elements of the IWCA. Just as the IWCA, outlined at the instrument level in Chapter Four, is a multilevel construction, reflecting information gathered about key levels in the organization, the sampling frame is also multilevel, reflecting the structure of the organization and how information flows through the organization.

The purpose of an audit is to provide data that can be accurately generalized to represent the larger organization. Depending on how the representative departments are chosen—statistically, by some random mechanism, or purposively, through some judgmental (e. g., subjective) choice or decision—the resulting estimates may be generalized statistically to represent a range of possibilities: the organization overall, a select group of departments or divisions, or only one department. The generalization can be document-focused, and the results of the audit assumed to represent the documents produced throughout the organization. The generalization can be division- or group-focused, and represent the performance of different divisions. Providing data that can be generalized, however, requires a sampling strategy that samples enough documents to provide good estimates and yet not does over-sample or sample intrusively. A comprehensive yet flexible sampling plan, therefore, is part of a well-designed IWCA.

As part of the IWCA, a sampling frame should adequately reflect the organization or the part of the organization under scrutiny; all key levels of an organization must be measurable or estimable. This frame creation precedes data collection and determines how the data collected through the audit can be generalized. The creation of the sampling frame is governed less by statistical factors than by how the organization wants to use the information obtained from the audit. These needs may differ by organization. Once the sampling frame is clearly defined and the sampling units (e. g., groups, individuals, and a specified number of documents) randomly selected, collection of data can progress. The interview data (Appendices 1-4) are relatively straight-forward sample and data collection issues. Deciding which documents and how many to collect for each individual is much more complex, and difficult to do randomly. Many documents, such as e-mail, are not saved. Paper copies may be made of a computer file and the computer file thrown away. If an organization does not have a mandatory file policy, many documents may be thrashed. In addition, if individuals selected to be in the IWCA sample fear that their work may not be of high quality, it is possible that the individuals might hide or destroy documents.

Document Selection and Collection

Before any documents are collected, the organization must decide what time interval will be included in the estimates and what kind of documents will be part of the analysis. The time interval might be one day, one week, or one month, or might be two separate time intervals, representing a "before" and "after" picture of the organization around a change point that the organization wishes to examine. The document focus may be on e-mail, a form of communication that can represent many genre of business documents, or on memos exchanged

in paper, e-mail, or fax form. Depending on the time interval, the kind of documents to be analyzed, and the number of documents available, all documents produced by an individual within the time interval or a random selection of those documents are selected for analysis.

Once a strategy for selecting documents has been agreed upon, physical copies—paper or electronic—must be collected. Although many workplaces have electronic documents in daily use, auditors cannot expect to obtain electronic copies of all documents in a workplace sample. Analysis should take place on-site if possible, or arrangements made to duplicate documents so that the original paper copies can be returned quickly to the individual's working files. Although electronic copies are easier to take away than are paper copies, all documents fall under the same organizational requirements for confidential handling and control.

Whether the documents are procured as electronic or hard copy, both quantitative and qualitative analysis will be labor-intensive. With electronic documents (hard copy documents might be converted into electronic text through scanning), programs such as SEAN[9] or customized commercial grammar-checking programs with internationally specific rules could automate document checking.[10] Automated checking has numerous advantages over hand tallying. Automated checking:

- is more economical to implement with large numbers of documents
- is more available to individual workers as a self-learning tool
- provides more consistent results
- provides more opportunities to perform exploratory analyses

The initial scoring and analysis plans, described in Chapter Six, assume the hand scoring of paper copies and well-defined computer analysis for a small pilot study. If electronic texts are available, more detailed analyses based on a larger number of documents are possible compared to those reasonable (e.g., affordable in terms of coding effort) when hand-scoring paper copies.

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9 Margaret Thomas et al., "Learning to Use Simplified English: A Preliminary Study," *Technical Communication*, 39.1 (1992).

10 Carol Leininger, *Using English as an International Language in Business*. Unpublished presentation Midwest Regional Meeting, Association for Business Communication, Cedar Rapids, IA. 1993.

C. A. Warden and J. F. Chen, "Improving Feedback While Decreasing Teacher Burden in ROC ESL Business English Writing Classes," eds. P. Bruthiaux, T. Boswood, and B. Du-Babock, *Explorations in English for Professional Communication* (Hong Kong: City University of Hong Kong, 1995).

Issues in Completing and Reporting the IWCA

Once collected, data must be analyzed and reported. Chapter Six is a description of an analysis plan based around three issues involved in completing and reporting the IWCA:

- the goals of analysis,
- the mechanics and logistics of analysis, and
- reporting strategies for the analyzed data.

The goals of the analysis are set with the organization, since projected use of the data makes a difference in the depth of audit chosen. A large organization for which international communication has great importance can more easily justify and bear large audit costs than can a small organization or one with limited global market share. Focus of use dictates the level of effort and influences sampling strategy. The projected use of the data drives the costs to some degree: the more important international and global communication are to an organization, the more precise a picture of its international communication the organization may need to obtain. Estimating the situation with a high degree of accuracy can be costly, and may be necessary for only a few organizations, such as joint ventures, with high stakes in the global marketplace. A less intensive or more tightly contained effort might be appropriate for an organization with a small international work force or low market share goals.

Measurement and assessment—what is actually counted, weighed, and examined at the document-level—is described briefly in Chapters Four and Six and in more detail in Appendix 4. Measurable does not necessarily mean quantifiable, although the more that quantitative measures or rating systems can be used, the easier analysis, and at times interpretation, becomes. A major consideration in designing the analysis plan is handling subjective response data. At all levels, the audit information is subjective to some extent and is open to errors of omission and commission. Errors in measurement and recall, and how these errors affect the generalizability of collected information, are addressed in Chapter Six. Attention to these statistical and logistical issues is necessary in a well-designed audit.

Analysis of data, after collection, depends on the level of detail and generalizability desired by the organization in addition to the detail considered essential by the auditor to meet basic IWCA requirements. A computer-based scoring system for data entry and analysis should be developed before large-scale data collection is attempted, and is discussed briefly in Chapter Six.

CHAPTER SIX—GOALS, MECHANICS, AND REPORTING OF DATA ANALYSIS

THE
NORMAL
LAW OF ERROR
STANDS OUT IN THE
EXPERIENCE OF MANKIND
AS ONE OF THE BROADEST
GENERALIZATIONS OF NATURAL
PHILOSOPHY ♦ IT SERVES AS THE
GUIDING INSTRUMENT IN RESEARCHES
IN THE PHYSICAL AND SOCIAL SCIENCES AND
IN MEDICINE AGRICULTURE AND ENGINEERING ♦
IT IS AN INDISPENSABLE TOOL FOR THE ANALYSIS AND THE
INTERPRETATION OF THE BASIC DATA OBTAINED BY OBSERVATION AND EXPERIMENT.[1]

Once obtained, data must be analyzed and reported. However, a plan for analysis needs to be in place long before undertaking data collection, even though, as is sometimes the case in many pilot or preliminary research projects, the full dimensions of the anticipated data are not well-defined. The anticipated IWCA data values can be determined to some degree by laboratory analysis and pilot studies. Although all possible responses for every research query cannot be anticipated, a flexible plan for preliminary analyses can be created by designing analysis and reporting shells to project how to process the collected information for an organization.

The projected analysis plan of the IWCA prototype addresses three components involved in completing and reporting an IWCA: the goals of analysis, the mechanics (scoring and computation) of analysis, and reporting strategies for the analyzed data. In this chapter, I discuss these three components of the IWCA analysis plan, all negotiated to some degree with the sponsoring organization during Phase I of the IWCA project.

Goals of Analyses

As discussed in Chapter Four, the IWCA has two main phases. The needs of the sponsoring organization are defined through interviews before document selection, collection, and analysis. The sponsor and auditor determine the goals of the analysis. An auditor knows, going into consultation with an organization, that different goals are possible depending on the

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1 W. J. Youden, statistician, quoted in Edward R. Tufte, *The Visual Display of Quantitative Information* (Cheshire: Graphics, 1983).

needs of the organization, the funding available, the time frame in which the results must be produced, the design of the sampling selection process, and the kind and amount of data that can be collected. Tailoring the IWCA appropriately to meet the goals of the organization is one of the auditor's key roles.

For example, an organization that wants an IWCA primarily to determine if the performance represented by its international divisions' e-mail and faxed memos were aligned with the new mission statement (e. g., to develop an international joint venture while maintaining national market share) would be interested in a quick analysis of only the international divisions' e-mail and faxed memos. If the organization wants to compare its current communication performance after a change in its mission statement with its performance under an earlier mission, data to establish that benchmark would include documents produced throughout the organization both before and after the change in mission. Another method to create a similar benchmark but requiring different data would be to conduct an IWCA soon after the mission change and to conduct a second IWCA several months later to see if the workers were responding to the mission change. Many reasons could exist for the workers not responding to a change in the mission statement. The change in mission might not have been conveyed clearly, and therefore workers might not have changed their communication patterns because they did not know that the organization's overall goal had changed. Or, workers might know the mission has changed, but not have the rhetorical strategies to meet the needs of the new mission. In this second case, the IWCA would be able to assess the workers' strategies as represented in their documents and estimate if their performance were aligned with the mission statement. In the first case, the mis-alignment or lack of change would be due to poor messaging strategies in the organization, which the prototype IWCA is not designed to determine. However, conventional communication audits are designed to trace message flow, and could be used to determine if the efficacy of message flow were a possible problem in the organization.[2]

Mechanics of Analyses

One of the initial assumptions behind the development of an inquiry and scoring method for the IWCA is that an auditor should not need extensive training to recognize the presence or absence of a defined document feature. If an auditor needed extensive training to reliably recognize a document feature, reasonable intervention could not be attempted in the workplace because the training to produce more effective documents would be too difficult to

2 Cal W. Downs, *Communication Audits*, Management Applications Ser. (Glenview: Scott, Foresman, 1988).

implement. Therefore "easy" features such as the use of acronyms and politeness markers are highlighted, and more "difficult" features such as document-level coherence, beyond the presence of multiple topics in a single message, are not examined in this prototype IWCA. "Difficult" features to detect in a scoring plan are assumed to be difficult features to modify in workplace training.

The basic concepts of the conventional communication audit are replicated and extended in the design of this IWCA to capitalize on existing research. One issue in designing an analysis plan is how to handle subjective response data. At all levels, the IWCA information is subjective to some extent, open to errors of simple or complex omission and commission. Errors in recall can occur, as can errors in measurement or assessment. All errors, both random—e.g., a lost document—and systematic—e.g., a consistent transposition during data entry—affect the generalizability of collected information. Attention to these kinds of statistical and logistical issues is part of any well-designed data collection, and must be controlled in the IWCA.

Subjective data includes self-report about the number of languages studied and level of fluency in the individual instrument (Appendix 3) and decisions made by the auditor about the number of topics in a single document (Appendix 4). The latter case, the subjectivity of judgments made by the auditing staff during scoring, can be controlled to some extent by training and double-scoring to check for consistency of subjective rating. The more the scoring and data entry system can be automated, such as in a full-scale audit, the more accurately the data can be represented. Accurate numbers, however, are not sufficient; the numbers must also represent valid, reliable, and reproducible data.

The ability of the data collection instrument to "get at" the desired attributes is referred to as validity, while the likelihood that the desired information will be collected is called reliability. Reliability is directly related to the data collection instruments.[3] A third attribute of data collection, related to validity, is reproducibility, the likelihood that the same data will be generated if the same questions or procedures are followed a second time. The prototype IWCA, as yet untested, is neither validated, known to be reliable, or certain to generate reproducible results. Some of the design assumptions, such as the length of sentences or the range of vocabulary presenting an increased processing burden on L2 readers, to a greater

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3 Janice M. Lauer and Patricia Sullivan, "Validity and Reliability as Social Constructions," *Professional Communication: The Social Perspective*. eds. Nancy Roundy Blyler and Charlotte Thralls (Newbury Park: Sage, 1993) 169.

degree than that experienced by L1 readers, are well-supported by research literature.[4] For other imbedded assumptions, such as the number of minor problem features in a document taking more weight in the proposed composite scoring schemes than one extremely serious problem feature, there is less empirical evidence to support that initial design choice in analysis.

There are a number of simple rating systems or measurement scales available for document analysis, including:

- 3, 5, 7, 10 point scales (e. g., Likert scales)
- counts
- percentage in document (calculated from counts)
- proportion in document (calculated from counts)
- yes/no binaries (0/1, reported as proportions or percentages)
- before/after binaries (0/1, reported as proportions or percentages)
- present/absent binaries (0/1, reported as proportions or percentages)

For the prototype IWCA, the majority of the data are scored as counts and their attendant calculated percentages and proportions, or as binary representations (see Appendix 1-4 for the IWCA instrument and the analyses suggested for each data item). Few Likert scales are included, although a designation of activity as "never or seldom," "sometimes," or "always" for message production strategies (shown in the individual questions in Appendix 3) is an example of a 3-point Likert scale. With quantitative data, composite scores can be used to create estimates to represent the performance of the organization or some segment of the organization. The documents selected from each individual, n_i, will be scored by the criteria (e. g., counts, presence or absence) for each item, x_{ij}, on the analysis instrument and a composite document score Σx_{ij} (or the mean of Σx_{ij}) for each item x_{ij} created for each individual, n_i. In practice, this can be visualized as follows. Suppose 16 documents are selected from each individual n_i in the sample. Six of the 16 documents contain spelling errors; therefore, 6/16, 37.5%, have one or more spelling errors. The six documents have 10, 2, 2, 5, 3, and 6 spelling errors. These can be calculated as the number per 100 words in each document, that is, the percent misspelled. Several composite scores for each individual n_i are then possible, as shown in Table 6.1.

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4 Paul Meara, "Word Recognition in Foreign Languages," *Reading for Professional Purposes: Studies and Practices in Native and Foreign Languages*. ed. A. K. Pugh and J. M. Ulijn (London: Heinemann Educational Books, 1984) 101-102.

Table 6.1. Example of Percent Misspelled Words as a Composite Score

Documents by n_i	Spelling errors	N words in document	% misspelled
d_{i1}	10	800	1.25
d_{i2}	2	300	0.66
d_{i3}	2	300	0.66
d_{i4}	5	100	5
d_{i5}	3	250	1.20
d_{i6}	6	400	1.5
Average % misspelled for 6 documents			1.46
Average for 6 documents	4.66	358	1.30
Sum of errors over 6 documents	28	2,150	1.30
Sum of errors over 16 documents	28	4,850	0.58

Four composite scores (percent misspelled per 100 words) are shown:

- 1.46, the average percent misspelled per document in six documents, an average adjusted for the length of different documents
- 1.30, the average misspelled based on the average number of errors in six documents and the average number of words per document
- 1.30, the average percent misspelled in six documents based on total errors and total number of words in documents that contain errors
- 0.58, the average percent misspelled per 100 words across the 16 documents, also an adjusted score reflecting the length of both the error-free and the error-containing documents

Any of the score calculations might be used in reporting the data to the organization, although the third score, 0.58, is diluted by averaging across the total number of documents instead of calculating the percentage for only those documents that contain errors. For the prototype IWCA, counted data is reported within the proportion, or percent, of documents exhibiting the counted feature. For example, in individual n_i's case, the percent of documents containing errors (6/16, or 37.5%) is reported, and within those documents, the number of

errors is 1.3 words misspelled per 100 words (in the actual report to the organization, individual data is not reported). When taken across individual n_i's group, these numbers are accompanied by standard errors or other estimates of variability such as the minimum and maximum (e. g., 20 to 80% of the documents contained errors, and within those documents, the average number of spelling errors was 1.4 per 100 words, ranging from 0.8 per 100 to 3.5 per 100).

The individual's score document level score, 1.46 errors per 100 words in documents with spelling errors, may be high for the organization, although perhaps not high relative to the average performance of individuals in many different organizations. A second factor contributing to error level is document genre. Some genre, such as electronic mail and drafts or work-in-progress, are expected to contain more spelling and typing errors than do more formal documents or documents that go out to a wide number of people. To avoid genre overlap and sloppy generalizations, it may prove necessary to separate genre and sample to select a number of different genre examples from each individual.

This kind of item analysis, in which item composites are formed for every document item on the IWCA across the individual, group, and ultimately the organization, is more time-consuming to read about than to actually analyze with a well-designed program. Data entry and computer analysis programs need to be developed simultaneously to ensure that the data are scored and entered in a form that the programmer can effectively code in an analysis. Programs address a variety of needs. The composite scores, created at the individual level, represent all documents that the individual writes. These individual scores can be inflated using the sample selection weights (if the sample is not a strictly proportional or simple random sample) to provide generalizable estimates. The estimates provide the basis for the analysis of the presence or absence of problem features between groups, departments, and divisions of the organization, as desired. While no statistical hypothesis testing is planned for the IWCA in its early stages, ranking groups or departments relative to one another in the same organization is a possible comparison procedure.[5]

Composite scores would probably be created for the following minimum set of summary analyses, depending, again, on the needs of the organization. Most organizations will probably find this basic set of information useful, although there might be specific issues (say, presence of graphics or adherence to company style guides) in which they would be more interested and that they would like highlighted in any final report.

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5 Some form of pre- and post-testing might be part of a check on workplace training, for example.

Summary statistics (weighted)

- counts and percentages across documents for individuals (not reported in final report)
- counts and percentages across departments/within departments (reported)
- counts and percentages across the organization (reported)
- counts and percentages across document genre (email, memo, letter, etc.)

Among the potential research analyses with which to further develop the IWCA instrument are correlation and cluster or factor analyses to determine if there is any statistical validity to the clustering of document features as message pragmatics, translation and readability, or cultural understanding issues. Some possible exploratory analyses include:

Exploratory analyses

- weighted and unweighted correlations for all items across all documents
- weighted and unweighted correlations for all items across all documents within groups
- factor analysis of all items across all documents
- cluster analysis of identified factors across all documents

Factor and cluster analysis has been used to generate and examine related features in expository prose, and may have some application to workplace documents.[6] Since the prototype IWCA is an untested instrument, these exploratory analyses are critical to the development of the instrument and its scoring categories.[7]

In the prototype IWCA, document scoring is initially designed to determine presence or absence of features, such as the presence of graphics, scored as a binary variable, 0 or 1, for graphics are either absent or present. If graphics or another feature are infrequently used, a detailed description of the rarely used features is not necessary.[8] When graphics, for example,

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6 William Grabe, "Contrastive Rhetoric and Text-Type Research," *Writing Across Languages: Analysis of L2 Text.* eds. Ulla Connor and Robert B. Kaplan (Reading: Addison-Wesley, 1987).

7 A small pilot study, involving between 49 and 70 documents from seven to ten individuals of one department has been proposed as a first test of the prototype instrument described in Chapter Four. Several small refining studies of this type are necessary before a larger study is attempted.

8 Detailed analysis of rare occurrences would drive up the cost of the IWCA without adding much value. Suppose only 5% of the documents contained graphics; detailed analysis on that 5% would have little meaning to the overall picture of the organization. Analysis of rarely occurring features could be part of developing a training program for the organization; otherwise, I suggest applying analysis effort to other aspects of the IWCA.

are frequent features of the documents being studied, the analysis of graphics can profitably be more detailed. Empirical techniques for evaluating content, presentation, and usability of the visual aspects of documents are offered by Patricia Wright.[9] A more detailed, twelve-question heuristic, based on Goldsmith's rhetorically oriented theory, is suggested by Sam Dragga. This detailed heuristic considers syntactic, semantic, and pragmatic features on four levels of unity, location, emphasis, and text parallels, and could be used for both evaluation and follow-up instruction.[10] Pragmatic unity, for example, refers to the appropriateness of image to context, both of text and culture: a skull and cross bones on a pesticide container might convey images of Halloween to U.S. children or be associated with the Day of the Dead for Mexicans. To clarify use or to provide higher levels of pragmatic unity, Dragga suggests adding bilingual labels to products. Schemes such as Wright's and Dragga's are good candidates for scoring heuristics when working with graphic-rich texts.

Conceivably, in a research context, an IWCA could be valuable simply as a diagnostic tool; the feasibility of focused training would be less of a driving force in the choice or complexity of textual features to examine. In a more research-oriented audit of workplace writing, extremely sensitive and fine-grained document analyses, such as Wright's and Dragga's analyses of graphics, might be worthwhile. Textual features, such as the use of cohesion devices (pronouns, coordinate conjunctions, subordinate conjunctions, prepositions) have been analyzed in a corpus by other researchers using tools such as The Writer's Workbench (WWB).[11] In this prototype IWCA, the focus is on relatively gross features in documents; the plan is limited to a more quantitative approach, measuring hit rate, because of the emphasis on application. If an organization has a low hit rate on these features, if the writers seem to consider L2 readers' needs and their performance aligns with the organization's mission, then intervention may not be necessary.[12]

Reporting of Analyses

The conventional communication audit as described by Seymour Hamilton is a collection of techniques; different methodologies are useful to help organizations meet different

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9 Patricia Wright, "The Quality Control of Document Design," *Information Design Journal* 1 (1980).

10 Sam Dragga, "Evaluating Pictorial Illustration," *Technical Communication Quarterly* 1.2 (1992).

11 Joy Reid, "A Computer Text Analysis of Four Cohesion Devices in English Discourse by Native and Non-native Writers," *Journal of Second Language Writing* 1.2 (1992).

12 Intervention in cases of apparent good alignment and few negative features would be more challenging to develop, since the features discussed in this IWCA represent the more directly applicable writing choices.

needs.[13] For example, in the final report, the workplace ethnography methods of observation and triangulation can be combined with more traditionally quantitative methods (e. g., surveys and in the case of the IWCA, textual analyses based on counting features) to provide value to the sponsor who has to incorporate the observations in the report into practical action. Part of conducting the IWCA involves recording field notes and constantly checking the background information obtained through formal interviews with the information available through informal channels. This additional information affects the auditor's perception of the situation being measured and evaluated with the IWCA instrument.

The final report, which may be submitted in a draft form or presented as results in progress to the organization during the final stages of the Phase II data collection and analysis, contains a narrative describing the organization's situation, supported by data collected during Phase I, a summary of the most striking numerical results collected during Phase II and a discussion of their implications, recommendations for action, and perhaps more extensive data displays in an appendix. The report, in addition to the information presented during the conduct of the IWCA and as formal presentations to selected members of the organization, is the reference source for the decision-makers of the organization, reflecting their investment in understanding the international communication practices of their organization.

The recommendations in this report, therefore, need to be written as a clear course of action supported by empirical evidence gathered during the IWCA. The action recommended may be to institute international communication training across the entire organization or in specific departments that seem to lack effective international communication strategies. Another possible recommendation may be that the organization should focus time and effort in other areas because the documents analyzed and interviews conducted indicate strong awareness of international communication strategies and good alignment between workers' performance and the organization's mission statements and international strategies.

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13 Seymour Hamilton, *A Communication Audit Handbook: Helping Organizations Communicate* (New York: Longman, 1987).

CHAPTER SEVEN—BENEFITS AND IMPLICATIONS OF RESEARCH

> But what if those ideals of clarity and simplicity have come to serve a very different ideological purpose. . . . What if, in this period of the overproduction of printed matter and the proliferation of methods of quick reading, they were intended to speed the reader across a sentence in such a way that he can salute a readymade idea effortlessly in passing, without suspecting that real thought demands a descent into the materiality of language and a consent to time itself in the form of the sentence.[1]

The side effects of the overproduction of printed matter, as people produce and process ever more paper and electronic text, is a primary concern of professional communication. In the workplace, people tend to write rapidly, drawing on their most familiar rhetorical strategies, and often do not have time to carefully review messages. This lack of review is typical of both the international and the national workplace. In the recent past—as recent as the early 1980s—a message sent to an international colleague was dictated to a secretary by an executive or upper-level manager. The secretary typed the letter on thin air mail paper, the executive reviewed and signed the letter, and the letter was sent in an airmail envelope with international postage. A week or two later the international colleague received the letter and considered possible responses before committing ideas to paper. The same exchange is conducted now by e-mail or fax within hours, and, as discussed in Chapter One, is conducted by many members of the organization, from executives to technical workers. Furthermore, the trained secretary is seldom involved; messages are created and sent by their original authors, often with little review. The effects of rapid document production and limited review in the international workplace, a focus of this dissertation, have been discussed primarily in the literature on translation of workplace documents.

However, a new wave in the research on workplace communication strategies, also discussed in Chapter One and referred to throughout this dissertation, has significance for international workplace writing. Localization, internationalization, and globalization of equipment and information are three main strategies in current use in software and hardware production and their attendant information products.[2] Recall that localization refers to

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1 Fredric Jameson, *Marxism and Form: Twentieth-century Dialectical Theories of Literature* (Princeton: Princeton UP, 1971) xiii.

2 All computer products, from hardware to customer documentation, are under industry and research scrutiny for design changes that can better fit their intended audience.

information tailored to a specific country or region; internationalization, to meeting the needs of more than one nation or language group; and globalization, to attempts to create globally-acceptable products. Localization often results in multiple product lines (e.g., for six countries there will be six different products in six different kinds of packaging), and is therefore relatively expensive. Localization in the workplace is reflected, for example, in the amount of translation people feel is necessary to convey appropriate messages. Internationalization may result in a single product with instructions printed in several languages. In the workplace, internationalization is seen, again, in multiple translations and in attention to factors that influence L2 reading of L1 texts. Globalization becomes a search for uniformity in needs across nations and languages. Uniformity is typically an ideal hard to maintain in a product line.

Within the workplace, a strategy used in globalization by the Swedish multinational firm ABB, discussed in Chapter Two, is redundant messaging to ensure that everyone in the organization is informed. This strategy ensures that (1) no one is left out of the chain of information and (2) if the message is not stated clearly by one source, the message may be clearer from another source. Explicit in the ABB overall globalization strategy is a requirement that members of the organization use English, the company language, regardless of their language preferences. Although many L2s, in ABB and other organizations, may be quite proficient in English, there may be idiosyncratic or overly localized features in L1 workplace writing that affect the reading time and comprehension of L2 readers, as discussed in Chapter Three. Idiosyncrasies can reflect lack of text review or limited rhetorical strategies used by L1 in their workplace writing. Either cause, that is, no mechanisms for review or limited rhetorical strategies can be addressed by changes in document flow or by training.

Determining the degree to which L1 writers meet L2 readers' needs in workplace documents seems an essential component of plans to improve workplace communication. However, while communication audits exist, and have been a feature of organizational research and application for over 20 years, few conventional communication audits focus on close textual analysis or on the needs of the international, multilingual workplace. To meet this need, I have developed an international written communication audit (IWCA), described in Chapter Four, based on existing research literature and my own professional experiences in international business settings. In the literature review and discussion in Chapter Two, I have shown briefly how the IWCA can be used to examine management communication strategies and to determine if an organization's international goals, or mission, is in alignment with its overall communication performance.

This research addresses the possible role of rhetorically- and linguistically-based evaluations of international workplace writing and begins to fill existing gaps with a prototype IWCA plan. I argue that while L2s may be quite proficient in English, there can be idiosyncratic or overly localized features in L1 workplace writing that affect the reading time and comprehension of L2 readers. These features can be due to lack of review and limited use of appropriate rhetorical strategies in L1 workplace writing. The IWCA is structured around three main strategic areas, discussed in Chapter Three:

- message pragmatics
- translation and readability
- cultural understanding

Conventional communication audits are structured to facilitate information collection and analysis. In addition, the IWCA is structured to facilitate these goals in the context of international business communication needs. Criteria that contributed to the development of this IWCA are that:

- research underlying the IWCA must reflect current practices to address workplace needs,
- text features must be both relevant to effective documents and measurable,
- the presence or absence of a critical document feature must be possible to determine without extensive training, and
- recognition of organizational standards must be part of the measurement and evaluation strategy.

In the remainder of this chapter, I discuss the immediate and long-term benefits of this research to develop the IWCA application, and the relationship between these possible benefits and the ethical issues inherent in workplace research. In closing, I consider some of the future directions this work might take.

Immediate Benefits

The immediate benefit of the prototype IWCA to participants will be in keeping with the low level intrusion into the workplace currently envisioned during any pre-testing and pilot testing of the IWCA as planned. Initially, an organization that allows access to their records and workplace will receive (1) a written descriptive summary of findings, with individual demographics masked, as described in Chapter Six, and (2) some suggestions to improve

workplace writing, tailored to the organization, and perhaps to each department or division within the organization, relative to the level of expertise observed in their documents.

For example, a group that already produces documents with effective graphics does not need to be told that including graphics will improve their communications, although they can be commended for exhibiting good international graphics strategies. Such a group might have textual problems of another order, such as mechanics or redundant prose, and training time would be best focused on these issues. Training, or need for the kind of training that this IWCA can diagnose, may not indicated. An organization might already be performing well in many or all areas represented by the IWCA, and therefore not need training in document-related issues. Certainly, an organization could seem to perform well in written international communication, as indicated by the IWCA results, but still have the perception, as an organization, that their international communication needed to be improved. In this case, focus groups could be appropriately used in different sections of the alliance to determine what contributes to the perception of inadequate international communication and what might be done to alleviate these problems.[3]

Based on their ethnographic research in corporations, Robert Brown and Carl Herndl argue that writing training in the workplace needs to be both sensitive to cultural assumptions and supported by management.[4] The cultural assumptions component of training must address the organization's own culture as well as the larger culture(s) in which the organization functions. Therefore, the effective IWCA must be able to assess cultural assumptions to determine the organizational culture to some degree. In recognition of the need for management support, international training programs must be capable of addressing the cultural assumptions evident in an organization's management strategy, market involvement, and mission statements. Management support for international workplace writing and communication training will depend in large part on the market share and globalization strategies, that is, the overall mission, that the organization is pursuing.

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3 Focus groups represent an information-gathering technique becoming more and more popular in business after successful application in marketing. Richard A. Krueger, *Focus Groups: A Practical Guide for Applied Research.* 2nd ed. (Thousand Oaks: Sage, 1994). Focus groups, which can be seen as a form of structured brainstorming or as a group interview, can contribute to the development of the IWCA in the first phase of application in an organization.

4 Robert L. Brown and Carl G. Herndl, "An Ethnographic Study of Corporate Writing: Job Status as Reflected in Written Text," *Functional Approaches to Writing Research Perspectives.* ed. Barbara Couture (Norwood: Ablex, 1986) 24. This idea, of management support, is reminiscent of the old Deming adage "Drive out fear!" which has been a cornerstone to the Total Quality Movement (TQM) in Japan and the United States.

Long-Term Benefits

Future benefits to organizations once the IWCA is well-developed include benchmarking across similar industries. The effectiveness of intervention strategies and employee education can be evaluated as a point of future research and performance evaluation. If L1 workers can be trained to enlarge their repertoire of rhetorical strategies to include review and revision of their own writing with respect to linguistics features particular to L2 readers, auditing these features in workplace documents will produce benefits for the organization. With some sophistication in development and application, the IWCA can be of tangible value.

One of the goals of my research program is to determine the degree to which the IWCA accurately evaluates L1 writers' performance is one of the goals of the research program. Assuming that the IWCA is, or can be developed into a useful evaluation tool, a second goal is to compare performance as measured by the IWCA with the international strategy of organizations and individual communicative skills to determine how much the management philosophy is reflected in the communication practices of both individuals and the organization. For example, does alignment of communicative strategies at the micro and macro level, individual and organizational, improve international workplace communication? How can alignment be measured? A third research goal is to interview L2 readers in the workplace, to determine if the document features highlighted in the IWCA are important for L2 readers or if other features, not reported in the literature, make more of a difference to workplace performance.

A concern in the development of the IWCA is the degree to which the time and effort to conduct the IWCA is justified by the benefits to staff and organization. This balance of costs and benefits is one aspect of the ethical examination of a workplace research program. The costs are not merely fiscal costs, since workplace evaluations hold the potential for misuse of power even where there may be undeniable benefits to workers and organizations.

Ethical Issues in Workplace Research

Workplace writing research is relatively new, and the goals of most studies have been relatively modest and non-invasive. However, ethical issues have surfaced and are being addressed by researchers. The rhetorical aspects of both data collection and research report writing are apparent in *Research as Rhetoric: Confronting the Methodological and Ethical Problems of Research on Writing in Nonacademic Settings* by Stephen Doheny-Farina. The ethical research text, according to Doheny-Farina, "will attempt to make explicit the ways in which the author is attempting to persuade readers through the use of the objective conventions

of research reporting."[5] As part of understanding researcher ethos in any study of workplace writing, it is useful to know something about the agendas driving the inquiry.

The agendas of both researcher and organization, and their interaction, need to be considered in any workplace investigation. Audits are intended to evaluate performance. Just like grades in a classroom, the results of a performance audit can be used to rank and demean the participants. However, when applied positively, the IWCA can be a way for organizations to offer focused training to those who might most benefit, and to save redundant or unnecessary training when a division or group is performing well. In my workplace experience, I have observed that ordinary workers who are not professional writers can improve their own writing with focused training and intervention. In addition to conducting workplace writing training, several companies for which I worked have undergone performance audits, such as those carried out by external auditing teams. Audits often result in lay-offs, in which individuals who work closely together must make decisions about who will go and who can stay, who is redundant and who is not redundant right now. People at all points along that continuum—from being declared redundant to being in charge of making the decision of redundancy—recall their experiences as emotionally-charged and bitter. Organizations that go through lay-offs have to go through grieving processes similar to those of the individuals who are laid-off from the organization. Organizational productivity and motivation are not quickly regained after lay-offs, yet lay-offs often seem unavoidable. Because of prevalence of lay-offs in the U.S., and of my observation of lay-offs in the U.S. and Switzerland, I have returned to the theme of workplace evaluation ethics several times in this dissertation. In Switzerland, for example, I remember the mysterious workings of the consultant auditors in suits. Invariably traveling in packs of three, their entry into an elevator would cause all the employees to pull back a few steps and fall silent. The presence of external auditors invariably signaled downsizing. A performance audit in a 5,000-person organization would last for three to six months, be reported back to the organization in about a year, and might have had little to do with the way the downsizing was administered. Knowing this role of the audit process, it is difficult for most workers to enter enthusiastically into an audit process, whether the audit is of financial details or writing strategies. This lack of enthusiasm and potential mistrust influences the data collection and analysis process, and may be one of the biggest drawbacks to practical success of the IWCA as an assessment methodology.

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5 Stephen Doheny-Farina, "Research as Rhetoric: Confronting the Methodological and Ethical Problems of Research on Writing in Nonacademic Settings," *Writing in the Workplace: New Research Perspectives* ed. Rachel Spilka (Carbondale: Southern Illinois UP, 1993) 261.

I developed this IWCA with the goal of recognizing, systematically, existing writing patterns and strategies so that international communication training could be developed to meet specific needs, if needs exist, in an organization. This IWCA has not been designed to identify individuals who cannot communicate well internationally; rather, its primary goal is to determine if documents in an organization can be improved. Since the IWCA plan is not based on a complete census of all employees, it should not be used to rank individuals relative to one another within a department or division. Despite this caveat, organizations may try to use an IWCA to cut back on staff. Cut-backs in staffing might even be a primary goal of the organization in seeking an audit.

There are ways to initiate the IWCA with an organization to preclude the use of the IWCA simply to prune an organization. It is the responsibility of the auditor and the organization to understand their goals and expectations prior to conducting an IWCA. It is not simply up to the organization to "do the right thing" unassisted, without a clear understanding of the limits of the current design of the IWCA. With time and design changes, however, the IWCA plan might be used to identify the less facile international communicators in an organization. Given the many reasons a person is employed, the relative effectiveness of an individual on a specific dimension of communication should not, on face value, provide sufficient reason for lay-offs or firing before training was offered, especially if the features measured by the IWCA do indeed reflect relatively common rhetorical strategies that L1 writers can learn to employ effectively.

GLOSSARY

BASIC English — An early example of "international" English. The BASIC (British American Scientific International Commercial) English System was developed in the 1920s by C. K. Ogden. The BASIC system, with a reduced vocabulary (850 words) and simplified grammar, was used to teach English to nonnative speakers and presented as a world language possibility in opposition to Esperanto or other modern languages.

bicultural — Two cultures involved in a transaction. Can take place within local or national borders or internationally. Often used as synonyms are *cross-cultural* and *intercultural.*

bilingual — As traditionally defined, a bilingual speaks and understands two languages equally well. True bilingualism is rare. Bilingual is often used to refer to someone who speaks two languages from childhood or who speaks two languages quite well.

communication audit — "Bundles" of methods to measure the communication performance of organizations. Communication audits (CA) may combine a methodologies such as survey methodologies, interviewing techniques, ethnography, communication network analyses, content analyses, and statistically-generated factors. These audits address relationships within an organization and conventionally focus on oral exchanges, on subjective responses to organizational relationships of power and authority, such as perceptions of workplace satisfaction, on task routing through contact networks, and on counting the frequency of communication. Almost without exception, published CAs focus on *L1-L1* communication patterns.

concurrent engineering— In high technology organizations in particular, concurrent engineering refers to the process of creating a product for both local and international markets. This design process can reduce the costs of adding in *localization* or *internationalization* features later.

Controlled English — English written in a standard style with a reduced word set dictionary to improve general comprehensive and reduce translation time and cost. Also known as *Simplified English.*

core information — The invariant information, also know as the base ("global") information, that can be reused when an information product is being *internationalized* for several different language groups or countries.

cross-cultural — Two or more cultures involved in a transaction. Can take place within local or national borders or internationally. Frequent synonyms include *multicultural* and *intercultural.*

EFL — English as a Foreign Language. Generally, English taught in non-English speaking environment to people who are already literate in one or more languages.

ESL — English as a Second Language. English taught to people who already know at least one other language (does not depend on students being literate in their first language). Synonyms: *ESOL.*

ESOL — English to Speakers of Other Languages. English taught to people who already know at least one other language (does not depend on students being literate in their first language). Synonyms: *ESL.*

ESP — English for Specific/Specified Purposes. English taught with a narrow focus or content area, such as English for Chemists or English for Machine Operators.

ethnocentric strategy — A traditional strategy for organizations entering into international markets. International work is undertaken much as domestic efforts would be, with the idea that what was successful in one country will be successful in another. Typically, an ethnocentric international organization has moved slowly into international business from a large, successful, national base, and its international involvement is seen as an extension of its home territory.

fluent/fluency — A person who is linguistically fully capable, in speech, listening, reading, or writing, or in any combination of these skills. To achieve speaking and listening fluency in a second language takes five to seven years resident in a country where the language is spoken or equivalent exposure. Functional competence is not the same as fluency. Functional competence can be achieved in one to three years of resident study.

geocentric strategy — Organizations with a geocentric strategy strive to balance the local climate, the home country perspective, and the global objectives of the organization.

globalization — The process of creating a product that can be used successfully in many cultural contexts without modification (definition in Nancy Hoft, *International Technical Communication: How to export information about high technology*, 24). Coke's 1996 Lunar New Year ads used world-wide are an example of globalization, for the Chinese New Year is a recognizable event in many countries and can be used to signal celebration to Chinese and non-Chinese alike.

global communication— *International communication* in which the participants try to minimize cultural diversity and national differences to achieve an almost "universal" agreement or course of action (?).

global product — A product that can be used successfully in many cultural contexts without modification (definition in Nancy Hoft, *International Technical Communication,* 24).

home country — Country in which a person, product, or organization originated.

host country — Country in which an activity takes place. Also referred to as *target country.*

intercultural — Crossing or encompassing more than one culture. Does not necessarily imply international. Common synonyms include *multicultural, cross-cultural,* and *bicultural.*

international communication—Communication between people and/or organizations which are located in two or more countries. May include communication across language groups or nationalities in the same country or within language groups or nationalities in different countries.

I18N — Shorthand for *internationalization*; there are 18 letters between the leading I and the trailing N of internationalization.

internationalization — The process of re-engineering an information product for easy *localization* for export to any country in the world. An internationalized information product consists of two components: *core information* (invariant information that can be reused), and *international variables* (variables which are localizable) (definition in Nancy Hoft, *International Technical Communication,* 19). The core information is also know as the base ("global") variables and the international variables as the cultural ("local") variables of the product and information.

international variables — The cultural ("local") variables of product and information in an *internationalization* effort. These variables can be localized, that is, adapted on a country-by-country or language-by-language basis to provide information which fits customer needs more closely than the original *source information* does.

ICA — International Communication Association. In the 1970s, the ICA developed a Communication Audit to measure organizational communication systems. The ICA Communication Audit was developed primarily by Gerald Goldhaber and Donald Rogers.

IWCA — International Written Communication Audit. Methodology developed in this dissertation to examine *L1*-authored documents for features useful to *L2*-readers. A second experimental goal is to use the IWCA to determine an organization's approach to *international communication.*

joint venture — An alliance that can cross national lines. Often two or more organizations will form an alliance to take advantage of mutual interests and equivalent strengths in the market place.

local — National or sub-national sphere of influence. A local company operates within a fairly narrow range of goods and services. The sub-national sphere can be referred to as *regional.*

L10N — Shorthand for *localization*; there are ten letters between the leading L and the trailing N.

L1	—	A person who speaks the language in question as a first language. L1 American English refers to someone who learned American English before any other languages.
L2	—	A person who speaks the language in question as a second (3^{rd}, 4^{th}, 5^{th}, ... n^{th}) language. L2 American English refers to someone who learned American English as a second (3^{rd}, 4^{th}, 5^{th}, ... n^{th}) language.
localization	—	The process of creating or adapting an information product for use in a specific *target country* or specific target market (definition in Nancy Hoft, *International Technical Communication,* 11). Synonyms for localization include adaptation, customization, *regionalization*, and the abbreviation *L10N*. General localization focuses on superficial cultural characteristics, while radical localization focuses on deeper cultural belief systems.
MNC	—	Multinational corporation.
multicultural	—	Used in contexts similar to *cross-cultural* and *intercultural.* Multicultural tends to refer to an environment in which multiple cultures are recognized and no one culture is consistently assumed to dominate or to be the cultural norm to which everyone is expected to conform.
parent company	—	The main company from which any number of smaller companies and *subsidiaries*.
polycentric strategy	—	An effort to be responsive to potentially competing demands or cultural expectations. Organizations involved in intensive *localization* efforts, with deep investment in *ttarget country* employment as an effort to decentralize operations, can be described as following a polycentric strategy.
regional	—	Several adjacent nations or a sub-national sphere of influence. A regional company operates within a fairly narrow range of goods and services. The sub-national sphere can be referred to as *local.*
regionalization	—	Localization of a product or information. PT Multi Bintang Indonesia (MBI), the Indonesian arm of Heineken, a Dutch firm, has worked with product tailoring and distribution on a very localized level in Indonesia, recognizing the cultural (e. g., ethnic and religious) differences within a single nation, and regionalizing its distribution and advertizing.
Simplified English	—	English written in a standard style with a reduced word set dictionary to improve general comprehensive and reduce translation time and cost. Also known as *Controlled English.*
source country	—	Country in which a document is first developed and produced.

source information — The original information produced to accompany a product or service. Source information often reflects the culture and language of the home or *source* country.

strategy — Plan or approach to problem-solving. In market-place competition, successful strategies are defined as those which rely on strengths not easily copied or replicated. Common synonyms include plan, perspectives, positions, ploys, and patterns are all contained within the concept of "strategy" in the sense applied by Mintzberg and Quinn in *The Strategy Process: Concepts, Contexts, Cases.*

subsidiary — A firm or company which is under the overall management of a larger, parent firm. Subsidiaries are often located in countries other than that in which the *parent firm* is located.

target county — Country in which a document or product is intended to be used.

world communication — Used as the "next step" beyond international communication by some diplomacy analysts. World communication and *global communication* seem to be used as synonyms.

APPENDIX 1—ORGANIZATION LEVEL

(Not all items are relevant for all organizations)

Background

1. Number and location of sites:

   analysis: description

2. Number personnel per site:

   analysis: number of national sites / % of locations / % personnel
   analysis: number of international sites / % of locations / % personnel

3. National volume of sales

   analysis: % volume nationally

4. International volume of sales

   analysis: % volume internationally (sales volume might not be the most salient measure for all organizations)

5. Number transnational (two or more countries) joint projects:

   analysis: description

6. Number joint projects in two or more languages:

   analysis: description, might be able to use proportions to describe project language distribution

7. Number total projects:

   analysis: description of size of organization, use as base for proportions

8. Number international departments:

   analysis: description; use to build sampling frame

9. Size (personnel) of international departments:

   analysis: description; construction of sampling frame

10. Activities of international departments:

    analysis: description of scope of work

11. Organization's international / global mission:

    analysis: comparison to the organization's mission statement

12. Overall organizational structure:

    analysis: description; construction of sampling frame

13. Organization's international structure:

    analysis: description; determination of ethnocentric, polycentric, geocentric, heterarchical strategies

Message Pragmatics

1. Internal national connection by (circle):

   e-mail fax teleconference shuttles courier

   analysis: description, comparison of national to international methods

2. Internal international connection by (circle):

   e-mail fax teleconference shuttles courier

   analysis: description, comparison of national to international methods

3. If available, is e-mail restricted to the organization (across national borders, across international borders) or open to external access?

   analysis: description of e-mail access

4. If teleconferencing available, how and how often is teleconferencing used?

   analysis: description of teleconferencing use

5. Number of international business meetings attended by employees:

   analysis: description, comparison of business to professional meetings

6. Number of international professional meetings attended by employees:

   analysis: description, comparison of business to professional meetings

7. People at what levels can place international calls without supervisor approval:

   analysis: description of control over individual actions, level of responsibility

Translation and Readability

1. Number of localization teams:

   analysis: presence or absence of localization, penetration in organization

2. Amount /frequency of translation done:

   analysis: presence or absence of translation

3. Routine or standard documents for translations:

   analysis: organization level policy for translation

4. Translations are done (*circle*):

   in-house on contract in target country other

   analysis: importance of translation, resources allocated to translation

Cultural Understanding

1. International communication training in place *(circle)*: yes no

   analysis: description of training programs

2. If yes, for which employees:

   analysis: description of level of training

3. Second language training in place *(circle)*: yes no

   analysis: description (related to global strategy)

4. If yes, for which employees:

   analysis: description of control and access levels

5. Intercultural communication training in place *(circle)*: yes no

   analysis: description , determine if organization sees intercultural issues as different from international or global issues

6. If yes, for which employees:

   analysis: description of level of management concern for quality of international communication

APPENDIX 2—GROUP LEVEL

Background

1. Number personnel in group:

   analysis: number of L1/ L2 % personnel

   construction of sampling frame

2. Number transnational (two or more countries) joint projects:

   analysis: description

3. Number joint projects in two or more languages:

   analysis: description, might be able to use proportions to describe project language distribution

4. Number total projects:

   analysis: description of size of group, use as base for proportions

5. International activities of group:

   analysis: description of scope of work

Message Pragmatics

1. Internal national connection by (circle):

   e-mail fax teleconference shuttles courier

   analysis: description, comparison of national to international methods

2. Internal international connection by (circle):

   e-mail fax teleconference shuttles courier

   analysis: description, comparison of national to international methods

3. If available, is e-mail restricted to the organization (across national borders, across international borders) or open to external access?

   analysis: description of e-mail access

4. If teleconferencing available, how and how often is teleconferencing used?

   analysis: description of teleconferencing use

5. Number of international business meetings attended by group members:

   analysis: description, comparison of business to professional meetings

6. Number of international professional meetings attended by group members:

   analysis: description, comparison of business to professional meetings

7. People at what levels can place international calls without supervisor approval:

   analysis: description of control over individual actions, level of responsibility

Translation and Readability

1. Number of translators in the group or on call:

   analysis: presence or absence, penetration in organization

2. Amount /frequency of translation done:

   analysis: presence or absence of translation

3. Routine or standard documents for translations:

   analysis: group level policy for translation

4. Translations are done (*circle*):
   in-house on contract in target country other

   analysis: importance of translation, resources allocated to translation

6. Style manual in-house *(circle)*: yes no

   analysis: description (compare workers with organizational perspective)

7. Style manuals used for which documents:

   analysis: description (compare workers with organizational perspective)

8. Frequency of document review for adherence to the style manual:

   analysis: description

9. Document templates in-house *(circle)*: yes no

   analysis: proportion (compare workers with organizational perspective)

10. Templates used for which documents:

    analysis: description

11. Templates used how often:

    analysis: description

12. Company dictionary in-house *(circle)*: yes no

    analysis: description, proportion responding over organization

13. Company dictionary used for which documents:

    analysis: description, proportion responding over organization

14. Frequency of document checking for adherence to the style manual?

    analysis: description, proportion responding over organization

Cultural Understanding

1. International communication training in place *(circle)*: yes no

   analysis: description of training programs

2. If yes, for which group members:

   analysis: description of level of training

3. Second language training in place *(circle)*: yes no

   analysis: description (related to global strategy)

4. If yes, for which group members:

   analysis: description of control and access levels

5. Intercultural communication training in place *(circle)*: yes no

   analysis: description , determine if group leader sees intercultural issues as different from international or global issues

6. If yes, for which group members:

   analysis: description of level of concern for quality of international communication

APPENDIX 3—INDIVIDUAL LEVEL

Individual ____
Department ____
Division ____

Background

General Description of Individual / Work Patterns

1. Number messages, on the average, you write a day *(circle)*:

	< 5	5-10	>10
E-mail internal	< 5	5-10	>10
E-mail external	< 5	5-10	>10
Paper / file internal	< 5	5-10	>10
Paper / file external	< 5	5-10	>10

analysis: description, proportion responding over organization

2. Time (minutes) spent writing different kinds of documents *(circle)*:

E-mail internal	< 5	5-10	>10
E-mail external	< 5	5-10	>10
Paper / file internal	< 5	5-10	>10
Paper / file external	< 5	5-10	>10

analysis: description, proportion responding over organization

3. Frequency of message review *(circle)*:
   others review your work you review others' work

   analysis: proportion responding over organization

4. Spell check documents *(circle)*:
   never sometimes always

   analysis: proportion responding over organization

5. Company has a list of approved / defined acronyms *(circle)*: yes no

   analysis: description (compare workers with organizational perspective)

6. Handling of acronyms in own documents:

   analysis: description

7. Company has a style guide *(circle)*: yes no

   analysis: description (compare workers with organizational perspective)

Individual ____
Department ____
Division ____

Message Pragmatics

1. Time zones within which you communicate:

   analysis: count, description

2. If you communicate to more than one time zone, what is your follow up on documents sent to different time zones?

   analysis: description

3. When writing to an international colleague, do you do anything differently than when writing within the company here?

   analysis: description

4. Extent of time overlap with international colleagues:

   analysis: description, compute average

5. Preferred method of communication locally *(circle)*:

   face-to-face telephone memo email fax

   analysis: percentages

6. Preferred method of communication regionally or nationally *(circle)* :

   face-to-face telephone memo email fax

   analysis: percentages

7. Preferred method of communication internationally *(circle)*

   face-to-face telephone memo email fax

   analysis: percentages

Individual ____
Department ____
Division ____

Translation and Readability

1. Style manual in-house *(circle)*: yes no
   analysis: description (compare workers with organizational perspective)
2. Style manuals used for which documents:
   analysis: description (compare workers with organizational perspective)
3. Frequency of referral to the style manual:
   analysis: description
4. Frequency of document review for adherence to the style manual:
   analysis: description
5. Document templates in-house *(circle)*: yes no
   analysis: proportion (compare workers with organizational perspective)
6. Templates used for which documents:
   analysis: description
7. Templates used how often:
   analysis: description
8. Company dictionary in-house *(circle)*: yes no
   analysis: description, proportion responding over organization
9. Company dictionary used for which documents:
   analysis: description, proportion responding over organization
10. Frequency of reference to company dictionary:
    analysis: description, proportion responding over organization
11. Frequency of document checking for adherence to the style manual?
    analysis: description, proportion responding over organization
12. First language:
    analysis: description, proportion responding over organization

Individual ____
Department ____
Division ____

Translation and Readability (cont.)

13. Second language: level of fluency (reading, speaking, writing)
    analysis: description, proportion responding over organization
14. Third language: level of fluency (reading, speaking, writing)
    analysis: description, proportion responding over organization
15. Frequency of reading work documents in second language *(circle)*:
    never sometimes daily
    analysis: proportion responding over organization
16. Languages in which work documents are read:
    analysis: description , counts of most common, least common
17. Graphics included in messages:(circle): yes no
    analysis: proportion documents include graphics
18. Graphics in messages produced by *(circle)*: self others both
    analysis: proportion self/others, self/both

Cultural Understanding

1. Holidays observed by the company in the US:
   analysis: description
2. Holidays observed in other affiliates:
   analysis: description
3. Location of other affiliates
   analysis: description
4. Most common sports played by the affiliates
   analysis: description

APPENDIX 4—DOCUMENT LEVEL

Document ____
Individual ____
Department ____
Division ____

Background

1. physical medium *(circle)*:
   paper electronic paper copy of electronic
   analysis: proportion over levels specified
2. transmission medium *(circle)*:
   paper mail fax courier email
   analysis: proportion over levels specified
3. genre *(circle)*:
   memo letter report e-memo notes
   analysis: proportion over levels specified
4. font type *(circle)*:
   serif sans serif mixed
   analysis: proportion over levels specified
5. font size *(circle)*:
   < 12 pt 12 pt > 12 pt mixed
   analysis: proportion over levels specified
6. length *(circle)*:
   < one page about one page more than one page
   analysis: proportion over levels specified
7. length *(fill in)*:
   ____ pages ____ paragraphs _____ words
   analysis: average over levels specified

Document ____
Individual ____
Department ____
Division ____

Message Pragmatics

1. Voice contact (circle): yes no

   analysis: proportion over levels specified

2. If yes *(circle)*:
   before after many times don't remember

   analysis: proportion over levels specified

3. If yes *(circle)*:
   telephone face-to-face teleconference

   analysis: proportion over levels specified

4. Use of Pronouns *(circle)*
   I We You They He/She none used

   analysis: proportion over levels specified

5. Description of focus *(circle)*

   Author Reader Reader's Situation Joint concerns

   analysis: proportion in documents sampled over levels specified

6. Use of grammar (circle, describe):
   passive construction, non-standard features

   analysis: count # non-standard features noted

7. Arrangement (circle):
   order chronologically perceived importance

   analysis: proportion in documents sampled over levels specified

8. Polite language (describe)
   (e.g., "please," "thank you," "would you," "could you")

   analysis: description, present in proportion of documents sampled over levels specified

Document ____
Individual ____
Department ____
Division ____

Translation and Readability

1. Length of sentences (word count)
   analysis: average over levels specified
2. Number of topics in a single communication (count)
   analysis: average over levels specified
3. Range of vocabulary (many ways to measure)
   analysis: average over levels specified
4. spelling (% words misspelled)
   analysis: average over levels specified
5. straight misspellings
   analysis: average over levels specified
6. spelled correctly, wrong word
   analysis: average over levels specified
7. spelled correctly, homonym
   analysis: how many per 100 words, proportion of document
8. number of topics in message (how determined)
   analysis: average over levels specified
9. verb-tenses disagreements
   analysis: average number of documents with one or more occurrence over levels specified
10. length of message (pages/words)
    analysis: average number of pages/words per documents over levels specified

Document ____
Individual ____
Department ____
Division ____

Cultural Understanding

1. Graphics (circle):
   present absent
   analysis: proportion in documents sampled over levels specified
2. If present,(circle):
   line graph table detailed drawing
   analysis: proportion in documents sampled over levels specified
3. Cultural references (circle): yes no
   analysis: proportion in documents sampled over levels specified
4. If any cultural references (circle):
   appropriate inappropriate mixed
   analysis: proportion in documents sampled over levels specified
5. Mottoes (circle): yes no
   analysis: proportion in documents sampled over levels specified
6. Metaphors (circle): yes no
   analysis: proportion in documents sampled over levels specified
7. Sports metaphor (circle): yes no
   analysis: proportion in documents sampled over levels specified
8. Slang (note) (circle): yes no
   analysis: proportion in documents sampled over levels specified
9. Acronyms (note) (circle): yes no
   analysis: proportion in documents sampled over levels specified
10. Idiom (circle): yes no
    analysis: proportion in documents sampled over levels specified

APPENDIX 5—LOCALIZING FOR THE PRC

> We have been told that we are living in a condition called postmodern, in an era called post-Cold War, and these labels convey a floaty mood of hangover. On any given day, the newspapers announce that humanity is going global and that it is splintering into fragments. Religious observance is on the rise, and we are advised to learn Chinese. Clearly, these are not confident times. [1]

Pilots and Controllers Must Speak English by 1998

> [CND 06/13/96] In a measure to meet the demands of the booming civil aviation industry in China and to adopt the international practice in flight conversations, the Civil Aviation Administration of China (CAAC) announced on Tuesday [June 11, 1996] that all pilots and ground controllers must speak English by 1998, through a large training project, according to a Reuters report. With China's increasing international flights and 47 foreign carriers flying to China, only less than half of the air traffic controllers can speak or understand English, and some pilots also lack good English skills.[2]

At any children's party, at any discount store, even at large traditional retailers like Sears, a large percentage of the goods in use or for sale in the United States are produced in the PRC. The U.S. and the PRC are working together more closely, as attested by the continued U.S. granting of Most Favored Nation status to the PRC and the record $33.8 billion U.S.-PRC trade deficit in 1995.[3] Despite this growing commercial interdependence, the U.S. and the PRC continue to be culturally disparate. Because it controls territories with a total of well over one billion people, the PRC represents the single largest potential market on earth. However, communication problems for U.S. English speakers in the PRC may be more severe than those found in other large international markets. For example, the former Soviet Union shares many cultural similarities with the West, and the common language of commerce,

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1 Philip Gourevitch, "Misfortune Tellers: In a New Trend, Hell is Other Peoples," *New Yorker* 8 Apr. 1996: 96

2 Shane Zhang and Liedong Zheng, "Pilots and Controllers Must Speak English by 1998," *China News Digest* No. GL96-079, 13 June 1996: Online.

3 "U.S. purchases of shoes, toys, machinery and other goods from China last year resulted in a record trade deficit with that country of $33.8 billion, the U.S. International Trade Commission reported yesterday. The deficit rose from $29.4 billion in 1994 despite a decline in U.S. purchases of textiles, mostly clothes, which had previously been growing. According to the commission, the United States bought $45.4 billion worth of goods from China in 1995, while selling the Chinese $11.6 billion. Fertilizers, airplanes and cotton were the main U.S. exports." "U.S. Post Record Trade Deficit with China in 1995," *Seattle Post-Intelligence* 26 July 1996, cited in the *China News Digest*, No. GL96-103, 28 July 1996: Online.

Russian, shares a great deal of vocabulary with English.[4] India is another huge potential market that, like the PRC, has many cultural and linguistic features quite alien to Western sensibilities. However, a large proportion of India's 900 million citizens speak English as a second language or as their primary language in school, like students in Hong Kong and Singapore.[5] Furthermore, English is the principle language used by the Indian government and the Indian commercial sector for international communications.

The situation of the PRC is quite different. During the three decades 1949-1978 in which the PRC was closed to the West, little communication or commerce took place between the U.S. and the PRC. The period represents an essentially unknowable chapter of Chinese culture, making communication based on good knowledge of the recent cultural background impossible for the majority of U.S.-Westerners to achieve.[6] However, since Nixon's 1978 liaisons with the Communist Chinese government in Beijing, U.S.-Americans have begun to gain an understanding of the current situation in the PRC and to develop contacts there. The authoritarian government of the PRC controls a vast land area with cultural traditions that are diverse, ancient and complex, and whose economic situation is filled with complications and contradictions, both culturally and politically.[7] Although its vast markets attract great interest and investment from the international business community, localization for the PRC presents some particularly difficult challenges. Approaching these localization problems from the perspective of information exchange requires developing increased cultural knowledge. The goal is to highlight the similarities and differences between U.S. and PRC-controlled markets; one method is to employ a form of organized brainstorming, in a "chunking" strategy as suggested by Nancy Hoft's similarities and differences matrix.[8]

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4 A Russian engineer in Des Moines claims that the languages are very similar; "Only the letters are different." Carol Leininger, *Multinational Communication in a High Technology Corporation: A Case Study*. Unpublished presentation, International ABC Conference, Montreal, Canada, 1993.

5 Of 393 secondary schools in Hong Kong in 1996, 231 taught the majority of courses in English—Ironically, the Anglo-English schools have yet to produce a generation really fluent in English. Eighty percent of Hong Kong students attend school in English yet "70% of 12-year-olds are suffering in other subjects because of their weak English." "Foreign Tongues," *The Economist* 2 March 1996: 36.

6 Godwin C. Chu and Ju Yanan, *The Great Wall in Ruins: Communication and Cultural Change in China* eds. Donald P. Cushman and Ted J. Smith, III. (Albany: State U of New York P, 1993).

Guo-Zhang Xu, "Code and Transmission in Cross-Cultural Discourse: a Study of Some Samples from Chinese and English." *Discourse Across Cultures: Strategies in World Englishes*. ed. Larry E. Smith (New York: Prentice-Hall International, 1987) 66.

7 For the most recent formal U.S.-government line on the PRC, check out the U.S. State Department Web Site on China. URL = http://www.usis.usemb.se/human/china.htm

8 Nancy L. Hoft, *International Technical Communication: How to Export Information About High Technology*, Wiley Technical Communication Library (New York: John Wiley, 1995) 61.

Similarities and Differences Matrix

Localization for an information product involves finding the special requirements or linguistic needs of the targeted country or region. A working group can begin consolidating its knowledge about its potential clients, whether the clients are within or outside of the organization, by following a "similarities/differences" worksheet. This worksheet, shown as a matrix in Table 5.1, also can act as an organizing palette of cultural and business issues for an auditor designing a Chinese-localization module to add to the IWCA, highlighting within the matrix writing issues relevant to message pragmatics, translation and readability, and cultural understanding.

Table 5.1. A Worksheet for Data for International Variables

Target Country:	People's Republic of China (Mainland China)						
Target Language:	CHINESE (Mandarin)						
	Political	Economic	Social	Religious	Educational	Linguistic	Technological
Similarities							
Differences							

Depending on the product or business goal, variables can be added to, or removed from, this data collection worksheet.[9] For example, if the primary products in the alliance are automotive, then "travel" or "transportation" or "automotive" becomes a primary variable in the matrix, even though different aspects of travel and automobile use are subsumed under the economic, social, or technological variables. The creation and development of these worksheets can be part of an ongoing international training program within an organization. Employees can directly engage in examining variables related to communication and be responsible for increasing their own cultural understanding. From the perspective of the IWCA, the auditor can use this brainstorming and organizing worksheet to discuss existing

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9 This idea of variables or "themes" is found in intercultural training. Brislin and Hui use 18 themes, categorized in a three-point framework (emotional reactions, knowledge areas, and cultural differences), developed from expatriate ("sojourners") experiences to shape training for managers planning to work in the PRC [Richard W. Brislin and C. Harry Hui, "The Preparation of Managers for Overseas Assignments: The Case of China," *International Business in China*. eds. Lane Kelley and Oded Shenkar (London: Routledge, 1993), *International Business Series*. 237]. Brislin, Cushner, Cerrie, and Yong pair the 18 themes with 100 critical incidents to expose people to the most common and/or most frustrating experiences faced by U.S.-workers in a foreign setting (Richard W. Brislin, et al. *Intercultural Interactions: A Practical Guide* (Beverly Hills: Sage, 1986).

information with organizations and to construct new IWCA modules tailored to the organization's own interests.

Current information about China and other Asian countries is inexpensively available through the Internet (e. g., *The China News Digest*, a daily news list, available in English and pinyin) and other news sources (e. g., *The Economist*, *The Wall Street Journal*, and *The Asian Wall Street Journal*). Books and articles are good sources for historical grounding; although current information is harder to obtain from books than from news reports, the depth of detail is often greater in books than is possible in a brief news report.

Political

Political can refer to country-level politics or industry-level politics. In this category in particular, conditions must be articulated for both the target and the source country. In this case, the goal is not simply to fill in the worksheet with information about the PRC, but to balance it with corresponding information describing the U.S. Both countries have political corruption, although corruption is perceived differently in the different countries.[10] Bribery and "speed" money are sometimes requested and often necessary in other countries, including the PRC. In the U.S., political funding for lobbying serves a somewhat similar function.[11] However, political actions in the PRC have much more severe consequences for individuals than political actions in the U.S., a long-standing and pervasive difference.

Along with pervasive political differences are ironic surface similarities. In the one, "political correctness" in language has become a central feature in schools and workplaces (with only semi-ironic reference to the "thought police"). In the other, also in line with political correctness, the use of the formal address "Comrade" is coming back into vogue.[12] However, politically incorrect language in the two countries has different consequences; the PRC Chinese nationals are much more politically aware of the consequences of speech and writing than are U.S.-born nationals. The consequences for the violation of standards of political correctness are different. In the U.S., such violation may compromise social standing or career prospects.

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10 "China's Politics of Crime," *The Economist* 10 Aug. 1996: 25.

11 Kamal Fatehi, *International Management: A Cross-Cultural and Functional Perspective* (Upper Saddle River: Prentice Hall, 1996) 594.

12 "An order has been given to the Communist Party members in Shanghai that they shall call each other 'comrade,' according to a Reuter report. The circular which carried the order stated that 'addressing each other as comrade is a fine tradition of our party.' The move is speculated to be a step to guard against capitalism's influence." Jim Yu and Liedong Zheng, "Shanghai Moves to Revive Use of 'Comrade'," *China News Digest* 20 June 1996: Global News, No. GL96-082.

The situation in the PRC is different, as the Tiananmen Square tragedy[13] and recent events such as the Harry Wu controversy illustrate.[14] These events have consequence not only in terms of large political events or in the stability of business risk, but also from an emotional perspective at the individual level. Therefore, when a group examines cultures and cultural values different from their own, discussion ranges widely and needs to be periodically brought back to topic. One technique to keep discussions from going off track is a compare and contrast method, in which the group agrees to supply a difference and then a similarity before going on to provide more differences or similarities. This compare and contrast method can both contain and facilitate a discussion.

Economic

As noted above, U.S. businesses must be fully cognizant of Chinese sensibilities regarding political correctness to take full advantage of the opportunities presented by the PRC market. For businesses carrying on trade from outside the borders of the PRC, these sensibilities must be respected in all communications directed to the PRC. An authoritarian government, the PRC takes notice of communication from outside of the PRC as well as internal business communications.[15] Concerns about slave labor within PRC factories is expressed at the expense of business connections.[16] World-wide labor conditions have become a political concern in the U.S.; these labor issues are tied to economic conditions in the

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13 K. K. Seo, "Economic Reform and Foreign Direct Investment in China Before and After the Tiananmen Square Tragedy," *International Business in China*. eds. Lane Kelley and Oded Shenkar (London: Routledge, 1993).

14 Violations of official standards of political correctness in the PRC includes spoken or written words calling for human rights, democracy, or emancipation of minorities, actions which can result in prison sentences and capital punishment. US Department of State China Human Rights Practice, 1995. URL = http://www.usis.usemb.se/human/china/htm

15 PRC nationals, in the course of doing their job (e.g., banking research for the Swiss securities firm SBC Warburg), have been jailed for divulging classified information. The problem arises with the definition of "classified" and the access to information "Chinese Economic Information: Classified," *The Economist* 26 October 1996: 92-93.

16 In addition to literal slave or prison labor, workers in China are often expected to work long hours for extremely low pay. U.S. companies contribute to this practice. Mattel's China operations pays its beginning Barbie doll workers 200 yuan (hiring officials offered young workers 350 but gave them 200), about $24 a month, and expect them to adhere to a three-year contract (Kathy Chen, "Boom-Town Bound: A Teenager's Journey Mirrors Inner Migration That's Changing China," *The Wall Street Journal* 29 Oct. 1996: A1). Mattel US refused access to their Changan factory and declined to comment to *The Wall Street Journal* on salaries beyond saying "We are confident that we provide these workers with a better standard of living than they would have without Mattel" (A4). Conditions in this particular factory, including behavior rules and dormitory living, resembles those offered to young women millworkers during the nineteenth century boom in weaving mills in New England.

countries in which factories are located.[17] If a U.S. citizen travels within the borders of the PRC, adherence to local standards of "political correctness" is even more vital.[18] When business exchanges center on manufacture, labor issues are critical to the communication. Organizations need to determine their international labor policy and to provide opportunities for all employees to understand how the organizations' international strategy relates to communication with members of the alliance, especially when the alliance is with an extremely different country, such as the PRC.

Representatives of U.S. businesses can fail to understand their Pacific Rim markets and the market cultures in seemingly obvious ways as trade expands into these new regions. The United States' Export Import Bank office, according to Robert Kaiser, Vice President of the Export Import Bank's Office of Communications, still fields questions such as the following from U.S. business people perched on the edge of negotiations in the Pacific Rim.[19]

Q: Do they have hotels?
A: Yes, they have many fine hotels, some of the finest in the world.
Q: What do they eat over there?
A: (We like to tell them chocolate-covered grasshoppers, especially after we have had a long day)
Q: Do they speak English?
A: Yes, better than you do.

What Kaiser from the Export Import Bank may mean by "better" is that many educated people in Taiwan, Hong Kong, Singapore, and the PRC speak a formal English code more consistently than do many U.S.-English speakers. What he does not mention is that the U.S.-English L1 speakers are typically more versatile in processing diverse English codes or linguistic registers. The U.S.-English L1s are able to read and interpret a wider variety of English dialects and variants, from more countries, centuries, and educational levels than is the

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17 The manufacture of clothing in the U.S. has traditionally been, and still remains in many instances, sweat shop labor. In 1995, Thai illegal immigrants were discovered locked in a clothing factory in southern California, brought into the country to work essentially as slaves. Major clothing companies are facing closer scrutiny in the U.S. for their labor practices at home and abroad.

18 A U.S. citizen, Harry Wu, while residing in the U.S., criticized the use of slave labor and prison labor in PRC factories. When he then entered the PRC, he was arrested and disappeared into the PRC prison system. Clearly representatives of U.S. businesses must respect the local laws and must not fail to understand the nature of the society if they are to pursue economic advantage in the PRC and similar markets.

19 Robert J. Kaiser, *Export-Import Bank*. Presentation, Ames, Iowa, 3 June 1996, 4:30 PM.

average, equivalently educated, L2 English-speaking Pacific Rim business person.[20] The difference in versatility, in fluency, is another way of talking about the differences in audience and audience expectation, and may contribute to an international training process as well as to the development of the IWCA.

The PRC and other Pacific Rim markets are growing at a phenomenal rate. Among the Asian markets, Korea, Taiwan, and Japan are the most economically solid from the perspective of the U.S. Export/Import Bank.[21] The PRC's markets are less stable, although Kaiser says that a U.S.-company in the PRC has excellent business prospects if the westerner does not make too many assumptions. An example of "too many assumptions"? A western sales manager found a distributor in Mainland China for his company's food products. The distributor was enthusiastic and assured the manager that there was good refrigerated warehousing. The manager, who had found making the contacts and arrangements surprisingly easy and so had extra time in his schedule, decided to visit the warehouse; he found products sitting unpalleted and uncovered in several inches of water under a dripping roof. Disaster was averted by the visit.[22] This kind of incident should not be seen as a problem in doing business with the PRC, according to Kaiser, but as a reminder that "good" may not mean the same thing to both sides of the PRC-U.S. arrangement. In writing, one needs to be quite explicit about the product's necessary storage conditions. In this situation, rather than saying "good storage," the manager needs to explicitly list the exact conditions necessary, e. g., product kept dry, elevated at least 10 cm above the floor, and sealed in 3 mm plastic, and make explicit the possible consequences, e. g., product will dissolve within two hours. This kind of warning is appropriate to any business or technical communication; however, the need to be explicit only increases as cultural differences increase.

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20 This flexibility in L1 and not L2 linguistics skills is common across languages. As a simple example, as a student I learned to read nineteenth century German yet was unable to decipher the headlines of *Das Blick*, the German equivalent of *The National Enquirer*. The high style of the 1800's was not compatible with the public style of the 1980's in German script. A similarly well-educated German would have no problem with either *Maria Magdalene* or *Das Blick*, as I have no trouble with either *The Scarlet Letter* or The *National Enquirer*. Given the prevalence of English and modern U.S. movies in Europe, a German might not find Hawthorne's book or *The National Enquirer* difficult to interpret. The cultural and educational influence of English in non-English speaking countries has ensured a divergence in relative levels of L2 literacies.

21 Robert J. Kaiser, *Export-Import Bank.*

22 Paul Jensen, "Palletizing the PRC," *Export Today* November/December 1995: 52.

Social

Related to the concept of "political correctness" mentioned above is the idea of social sensibility.[23] For persons from a Western culture such as the U.S., this translates as something close to "social ethics." In traditional Chinese society social ethics is based upon Buddhist and Confucian ideals of social responsibility that, while rejected by the official communism of the PRC, are very much alive among the masses of ordinary people.[24] While it is not practical for most representatives of U.S. businesses to study classical Chinese ethics, the Chinese concept of social responsibility is not so different from that found in Western humanistic cultures that encourage charity and benevolence towards others and that repudiate greed and selfishness.

Following Confucian thought, relationships are characterized by unequality, the family is the model for all organizations, moderation in all things is encouraged (as well as thrift, hard work, and study), and virtuous behavior is expected. One of the differences in how the "golden rule" is expressed is noted by Geert Hofstede: "Virtuous behavior towards others consists of not treating others as one would not like to be treated oneself (the Chinese Golden Rule is negatively phrased!)." The Confucian turn of a Christian ideal is said to be "if one should love one's enemies, what would remain for one's friends?"[25]

This classical heritage in the PRC is in part responsible for what Westerners perceive as a polite, reserved culture. Understanding this reserve is important in face-to-face communication and can affect written communication. For example, given (first) names are not used initially in business exchanges in China, while in the U.S., first names indicate affinity and solidarity in business.[26]

Religious

The PRC is officially atheistic since its establishment in 1949. However, the main religions of Mainland China before the Communist Revolution, primarily forms of Buddhism,

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23 The Chinese term is *ren*.

24 "Old rituals in a new China," *The Economist* 17 Aug. 1996: 31.

25 Geert H. Hofstede, *Cultures and Organizations: Software of the Mind* (London: McGraw-Hill, 1991) 165.

26 Ron Scollon and Suzanne Wong Scollon, *Intercultural Communication: A Discourse Approach* (Cambridge: Blackwell, 1995) 123.

Kathleen Krone, Mary Garrett, and Ling Chen, "Managerial Communication Practices in Chinese Factories: A Preliminary Investigation," *The Journal of Business Communication* 29.3 (1992).

Confucianism, and Taoism, continue to exert a profound influence.[27] Christianity has had little success in China in spite of centuries of missionary activity typically associated with western imperialism. Judaism has existed continuously in small enclaves for nearly 2000 years. The Tibetan plateau in the western PRC-occupied territory includes the so-called Tibetan Autonomous Region (Xizang), Tsinghai, and most of Szechwan, Yunnan and Kansuis, and is inhabited by people with a very different ethnic, linguistic and religious background than the Han Chinese.[28] The religion of the Mongols, in the Mongolian Republic as well as in those parts of Mongolia controlled by the PRC and by Russia, is based upon Tibetan Buddhism. Islam, however, is the main religion of vast areas of the northwestern parts of the territory controlled by the PRC, including all of Sinkiang and Uygur and parts of Kansu, Ningsia Hui and Inner Mongolia. In these areas Moslems have been resisting Chinese control since the PRC take-over in 1949. Like the Tibetans and Mongols, the Moslems see their lands as being invaded by the Han Chinese, and continue to pursue independence from the PRC.[29]

The U.S. has no official religion, but many aspects of the social and cultural environment are based on a Christian ethos and the tolerance for non-Christian religions fluctuates. Though the U.S. Constitution, as amended, contains guarantees for the separation of church and state, the degree of separation remains uncertain. For example, some State constitutions still require an applicant for any state office, from governor to notary public, to sign an oath affirming a personal belief in a "Supreme Being."[30] Other examples of the use of Christianity in an official civil role include references to this supreme being, by the name of "God," on the currency of the U.S. and in the "Pledge of allegiance." Some interpretations of

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27 Oded Shenkar and Simcha Ronen, "The Cultural Context of Negotiations: The Implications of Chinese Interpersonal Norms," *International Business in China*. eds. Lane Kelley and Oded Shenkar (London: Routledge, 1993) 194-195.

28 The Tibetan language is in the same language family as Burmese. Culturally, Tibet is part of South Asia, with close cultural, historic and ethnic ties to India and Nepal. The religion of Tibet is a form of Buddhism most closely resembling ancient and medieval Indian Buddhism.

29 Many minority peoples have been killed or are confined as slave laborers producing inexpensive goods for U.S. and other export markets. A fifth of the Tibetan race, over 1.2 million people, have been killed by the PRC since it invaded Tibet in the 1950's (Amnesty International's Report on Tibet, http://www.oneworld.org/amnesty/china/china html). If these three groups were to regain their independence, the PRC would lose nearly two-thirds of its present total land area, although only a small fraction of its total population, since the majority of the PRC population lives in the fertile coastal regions.

30 Arkansas, Maryland, North Carolina, South Carolina, Tennessee, Texas, and Pennsylvania all require public officials to believe in a higher power. This legislation tends to be remnants of the colonial period, originally designed to prevent Catholics, Jews, and atheists from holding office. Pennsylvania's constitution further requires that "holders of public office must believe not only in a Supreme being but also in 'a future state of rewards and punishments.'" "In (Blank) We Trust," *The Economist* 12 Oct. 1996: 32.

this term "God" suggest that it includes the deity of the Jewish tradition, and that it can encompass the Moslem deity, Allah. Like the PRC, the U.S. is made up of a great number of religious and ethnic groups. Both have a dominant group, white Christians in the U.S. and Han Chinese in the PRC. In intercultural training, participants might generate examples of advertising or written material that they found inappropriate from a religious perspective, and try to determine what, if any, comparable religious references might be considered inappropriate in China.[31] Because religion and ethnicity are closely related in China, although less so in the U.S., ethnic references might be as much a part of the religious variable as of the cultural or social variables.

Educational

In any of these categories, the focus should be on similarities and differences important to the shared work. However, gauging the level of detail and complexity necessary to create a useful framework is problematic in all categories of examination. For example, considering the education variable in a useful way requires including general education as well as college or professional education. Focusing on language learning and language skills within this broad category seems appropriate for both the IWCA and for business communication training.

In Chinese elementary and secondary school systems, as described by Joan Carson, three variables influence language learning: the social context of schooling; the cognitive considerations of the written code; and the pedagogical practices most used in teaching reading and writing. According to Carson, schools in China are expected to teach love of country, service to others, willingness to abide by the group's decisions, and respect for authority. Language is understood as a medium for expressing social cohesion, not as a medium for expressing individual meanings. These societal attitudes towards education and towards language influence both pedagogical practices as well as students' attitudes of literacy and literacy learning.[32] From compositions written by Chinese college students, Carolyn Matalene identified some differences between Chinese and western Rhetoric. Similar to Carson, Matalene found Chinese students liked to imitate writing models, to use set phrases and culturally valued clichés, and to memorize as a way of gaining knowledge; the students, furthermore, were extremely indirect both socially and linguistically. Matalene asserted that "the central purposes and practices of Chinese rhetoric is to achieve social harmony and to express the views of the group by referring to tradition and relying on the accepted patterns of

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31 People's own experiences often provide the most illuminating examples.

32 Joan G. Carson, "Becoming Biliterate: First Language Influences," *Journal of Second Language Writing* 1.1 (1992).

expression."[33] These attitudes, according to Carson, carry over into learning a second language.[34] In writing English, then, PRC Chinese might be expected to use indirect language and to follow a style agreed upon by the group.

In the U.S., individual expression is promoted as an important aspect of language learning at the elementary and secondary school levels. Consider the advice given to U.S.-parents on engaging their children in meaningful discussions about school performance; a stock leading question now is "Did you ask any good questions today?" School experiences vary between adults and their children, and among adults of different ages or from different parts of the U.S., even though public education is mandatory (generally, grades 1 through 12 or until age 18). At the college-level, education diverges further still. Access to language and math instruction may be the most divisive variable within the U.S. education system.

The Johns Hopkins Nanjing Center notes that the language requirement (functional in Chinese) has limited the number of Western graduate students able to enter courses of study in China. Conversely, relatively many PRC nationals now attend U.S. universities, a situation reminiscent of the late 1930's and 1940's when large numbers of Chinese came to the U.S. to study. At that time in China, not unlike the immediate post-1978 PRC opening, no one knew where they might study, and students studied German, French, and English among other languages. One 1947 University of Chicago graduate noted that she and her siblings had studied several western languages because they did not know where they might study abroad. "I was lucky, because when I got to Chicago, they required two foreign languages for the Ph.D. English didn't count—because we were studying in English. Chinese didn't count—because the University didn't consider your first language a foreign language. So everyone had to learn two more languages. I already had three, French, German, and Japanese, but for other Chinese students it was tough, very tough."[35] Since the PRC's 1978 reopening of relationships with the West, PRC nationals attended U.S. universities, first as a small set of carefully selected students, such as those hand-picked to study physics at Harvard and other top U.S. universities, and then through more general application. For a majority of these admittedly quite successful students, who represent the top students in a country of over one billion people, learning English has been difficult because of the many ways in which Chinese and English diverge.

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33 Carolyn Matalene, "Contrastive Rhetoric: An American Writing Teacher in China," *College English* 47.8 (1985).

34 Carson, "Becoming Biliterate: First Language Influences."

35 G. F. Ma, Personal Communication: Chapel Hill, NC, 1979.

Students in the U.S. are taking more language classes than in the recent past. Reflecting the changing demographics in the U.S. and students' awareness of trade agreements such as NAFTA, Spanish is the most popular language. Chinese is taught at a number of universities although at few high schools in the U.S. Just as many Chinese find learning English difficult, U.S. students find learning Chinese, a tonal language represented by characters, extremely difficult. The absence of articles in Chinese and the power of single verbs to function as sentences are two of the more striking differences between Chinese and English.[36] Differences can help illuminate the English language patterns of L1 Chinese speakers, and may help in the development of writing intervention modules for organizations working with L1 Chinese.

Linguistic

The Chinese language is more accurately described as a family of languages rather than a single language. One written form, character-based, represents the language group, with over half a dozen major dialects and a number of sub-dialects of Chinese in current use.[37] An example of this oral convergence to written form is evident in Chinese movies, which are subtitled with Chinese characters so that people who do not understand the actors' dialects can follow the story. For many Chinese speakers, Mandarin, the standard Chinese, is a second language. Mandarin is used in formal speech, which is quite different from ordinary Chinese conversation. Although such difference exists in any language, including English, the difference between formal and informal communication may be greater in Chinese than in English.

Written Chinese, represented non-phonetically by characters, has changed greatly since the early 1900's when western-style punctuation was first added to the columns of characters. Before the introduction of western punctuation, the reader was expected to understand grammatical relationships from context and word order. Texts were written in columns to be read top right down and back up and then down each successive column until the bottom of the left-most column. Scrolls and then books read from far right to far left. Books printed in the PRC are now written in Western style (left to right, with horizontal text) while Taiwanese texts still use the column approach. A second innovation in written Chinese in the PRC has been the simplification of characters, like the introduction of Demotic Greek during the 1970s in Greece, meant to increase the literacy levels by decreasing the complexity of the most commonly used

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36 When I first studied Chinese, the power of verbs and the importance of context were the conceptually most difficult features of the language for me.

37 Derk Bodde, *Chinese Thought, Society, and Science: The Intellectual and Social Background of Science and Technology in Pre-Modern China* (Honolulu: U of Hawaii P, 1991) 16.

characters. This second innovation, unlike the introduction of punctuation, does not affect Chinese L1 literacy in English. A number of different forms of Romanization, such as Pinyin and Wade-Gilles, were originally developed more for the benefit of L2 readers, although L1 readers learn and use these systems as part of international communication via computers.

A basis of research in contrastive rhetoric has been to search out differences. Some controversy exists about the differences in structure between Chinese and English texts. When comparing classical and modern Chinese texts to English, Bernard Mohan and Winne Lo found no support for claims that the organizational pattern of Chinese writing differs markedly from that of English.[38] A similar study comparing the introductions to papers written in a variety of related disciplines by three groups of scientists (Anglo-Americans writing in English, Chinese writing in English, and Chinese writing in Chinese), by Gordon Taylor and Tingguang Chen, found an underlying rhetorical structure common to all language groups and disciplines yet with some systematic variations. Some variations characterize the discipline while others show strong differences between Western and Chinese scientists, irrespective of the language used in writing.[39]

The earlier example, in which Kaiser of the Export-Import bank claims that many Chinese speak better English than do many U.S.-L1s, highlights a problem of perception of linguistic competence observed in a variety of settings. In language learning, as in many forms of learning, people need to be able to "guess and pretend," as succinctly described by Barbara Engel, a Swiss teacher of German as a Second Language.[40] Some people are better at guessing, some at pretending, but both skills are necessary to make progress in language learning. The role of guessing, of hermeneutics and Davidsonian passing theory, in international communication is described from a more theoretical viewpoint by Rue Yuan.[41] One guesses what is being said, or what response might be appropriate, and pretends to be following and understanding the conversation, and in the process makes an interpretation. Without displaying these two skills, the L2 speaker loses contact opportunities in the target language. The L2 may "get" only 10% of what is being said, but if the L2 does not pretend to follow the conversation, the L1 speaker will ignore the L2 and the L2 will not get even that

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38 Bernard A. Mohan and Winnie Au-Yeung Lo, "Academic Writing and Chinese Students: Transfer and Developmental Factors," *TESOL Quarterly* 19.3 (1985).

39 Gordon Taylor and Tingguang Chen, "Linguistic, Cultural, and Subcultural Issues in Contrastive Discourse Analysis: Anglo-American and Chinese Scientific Texts," *Applied Linguistics* 12 (1991).

40 Barbara Engel, Personal Communication: Basel, Switzerland, 1990.

41 Rue Yuan, "The Yin-Yang Principle and the Relevance of Externalism to International Communication," *JBTC* July (1997): in press.

10%. "Guessing and pretending" work better in face-to-face conversation than on the telephone or in written exchanges. A great deal of guessing is involved in reading,5241 although the reader is able to check word meanings in dictionaries or to compare a document against other documents. In writing, the L2 (and the L1) is more exposed.

Technological

The technological issues to highlight first in the worksheet are those related to the organization's product. For an automotive company, the use of and kinds of automobiles are crucial. For a computer firm, exploring the number of people who can use what kind of computers is important.[42] Technology in China is rapidly changing; Motorola plans to extend wireless communications to provide Internet access, faxing, e-mail and paging for Chinese executives.[43] In the U.S., while technology is also changing rapidly, access to the Internet is still a powerful metaphor, so powerful that presidential candidates can invoke Internet access as a campaign goal. One of the goals of exploring the technology variable, as I currently see it, is to explore not only the product being jointly produced but the cultural impact of common objects on language and cultural assumptions, discussed in the cultural understanding section later in this appendix.

In general, these brief, book-report-like summaries of Hoft's international variables indicate directions that could be taken by an auditor or working group using the similarities and differences matrix. Forcefully constraining the matrix to useful information might not be a reasonable goal for the first several iterations, especially if the worksheet is being used as a training tool in addition to generating salient items for an IWCA localization module. Once the matrix has begun to take shape, features can be extracted that contribute to the message pragmatics, translation and readability, and cultural understanding sections of the IWCA. Outlined in the following three sections are some of the PRC-specific features related more specifically to IWCA.

Message Pragmatics

In documents written in English for Chinese L1s readers, politeness strategies and spelling errors in workplace documents are both critical issues. Salutations are important in

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42 Computer use is increasing in the PRC and Chinese students show a facility for programming. However, Internet access is limited in the PRC. About 20,000 people are currently accessing the Internet in China, with an increase to one million predicted by the year 2000. About 50 million people already use the Internet elsewhere, primarily in English. "Lessons from China, in Chinese," *The Economist* 31 Aug. 1996: 32.

43 Fang Wu and Daluo Jia, "Motorola To Extend Wireless Chinese Language Data Communications to China," *China News Digest* 15 Oct. 1996.

documents, and should be accompanied by titles and honorifics.[44] However, to refer to a PRC national as "comrade" would be an error even though the term is being used again among members of the Communist Party in the PRC; Mr., Ms., Dr., may be appropriate terms of respect. Politeness markers in addition to honorifics, like closing statements of regard and respect, are also appropriate. Tone, signaled in part by how abruptly a letter or memo is written, is both a message pragmatics and a translation issue. Beijing Jeep experienced tone difficulties in their attempt at a joint venture; Chinese partners found that letters that sounded fine in English sounded rude when translated into Chinese, and the U.S. partners thought that the suggested changes offered in the translation process were toning down the message, making "it sound too nice."[45]

Spelling errors, referenced also in translation in addition to message pragmatics, surfaced as an important factor in a reading protocol "mini-study" of two PRC Chinese speakers reading English documents. Spelling errors were processed as legitimate text by two L1 Chinese and noted as typographical errors by one L1 U.S.-English speaker. A single simple typographical error illuminates the recognition problem for the L2 reader of this paragraph of the study protocol.

> Fumonisins B_1, B_2, B_3 (commonly identified as FB_1, FB_2 and FB_3, respectively) are mycotoxins produced by *Fusarium moniliforme*, a fungus which commmonly attack corn plants world-wide. These recently discovered water-soulbe mycotoxins were first observed to be a human health threat in teh Transkei region of South Africa, where consumption of moldy corn was associated with a highly increased risk of contracting esophageal cancer (Sydenham et al. 1990). Though not proven experimentally, Sydenham et al. (1990a) and Rheeder et al. (1992) indicated that the presence of FB_1 and FB_2 in both moldy and apparently healthy corn samples was strongly correlated with teh prevalence of the disease in high cancer versus low cancer areas.

The words *commonly* (commmonly), *soluble* (soulbe), and *the* (teh) were mistyped, and a subject-verb agreement mismatch inserted in the first sentence ("a fungus which commmonly attack"). The two L2 readers interpreted *teh* differently than the L1 reader; the L2 readers tried to read *teh* as a word while the L1 reader commented on the typing mistake ("I mistype *the* the same way as this person"). One L2, an English major, referred to the *teh prevalence* as if the *teh* were a chemical substance. The second L2, a Food Science major, did not specifically refer to *teh* until after the formal interview was finished; she then commented

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44 Ralph Fasold, *Sociolinguistics of Language* (Oxford: Blackwell, 1990) 31-33.

45 Jim Mann, *Beijing Jeep: The Short, Unhappy Romance of American Business in China* (New York: Simon and Schuster, 1989) 186.

about misspellings, noting that she had had to read the final sentence in the first test paragraph twice before she decided that *teh* was a misspelling of *ten*. The first occurrence of *teh*, immediately before the regional name Transkei, was not noticed by the L2 English major.[46] The L2 Food Science major decided that *teh* was a part of the country name, like Sir Thomas or Sri Lanka, and probably should be capitalized but did not process the word as a mistyped *the*. The misunderstanding might be related to the lack of articles in Chinese

The context in which typographical errors occur is clearly important to the interpretation of the word. The two L2 readers, who had both scored over 600 on the TOEFL exam (one within one question of a perfect TOEFL score) both attempted to interpret *teh prevalence* as a rational word set, suggesting that the general impulse of L2 readers is to read text as if it is correct.[47] Another possible cause might be the lack of articles in Chinese and the subsequently lower familiarity with articles in a second language. The L1 reader read and noted *teh* as a typo. Reading text as if correct is standard practice for L1 and L2 readers; the divergence is in how quickly and confidently the reader can ascribe a variant feature to typographical or other sources. L1 readers make these decisions more quickly and confidently, and may take the "betrayal" of the L1 text less personally than does the L2 reader.

A variation as simple as a two character transposition thus affects L2s' reading speed and comprehension. On a large scale, a single text might be read by many L2 readers, each of whom would spend extra time deciphering textual variations. Across many readers, the time lost for even simple variations in text could be severe, especially if the variations led to misunderstandings that affected actions or attitudes. The practical importance of treating text for an L2 audience differently than text intended for an L1 audience may be expressed in simple economic terms of reading time saved, or projected on a larger scale to consider time and effort saved in appropriate execution of tasks as opposed to inadequate follow-through on written directives. While the issues of misspellings are pragmatic ones for writers ("no time to run spell-check, this e-mail is gone"), readers can see the presence of misspellings as a sign of

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46 No probe was made; I had missed the presence of the typo and did not ask about it when I conducted the first interview. This project was conducted in 1994.

47 This may also indicate support for John Hinds' reader-writer responsibility typology. Hinds points out that in English the person primarily responsible for effective communication is the writer. It is the writer's task to make clear and well-organized statements. However, in other languages such as Japanese, Korean and Chinese, the person primarily responsible for effective communication is the reader. If there is a breakdown in communication, it is not because the writer has not been clear enough, but because the reader has not exerted enough effort to understand. If, in fact, the writer has not been clear, the responsible reader has been in a sense betrayed. John Hinds, "Reader Versus Writer Responsibility: A New Typology," *Writing Across Languages: Analysis of L2 Text*. eds. Ulla Connor and Robert B. Kaplan (Reading: Addison-Wesley, 1987).

disrespect. Misspellings also affect translation and readability, which are an important link to the IWCA for Chinese speakers.

Translation and Readability

Limited vocabulary, clear syntax, correct spelling, and use of acronyms are translation and readability issues of apparent central importance to the PRC module.[48] The two written languages, English and Chinese, are different enough that until L1 Chinese are quite proficient in English, they approach reading in English as translation—especially if they have not yet had an opportunity to travel or live in an English-speaking country. This is not a situation unique to the PRC L1s; however, the degree of difference and isolation is greater for L1 Chinese based in the PRC than for those who have had more opportunities to travel and absorb English-based culture, such as the Taiwanese or Hong Kong L1 Chinese.

Even for those living in the U.S., U.S.-culture can be difficult to absorb, as indicated by the following two U.S.-English "sentences" that a trained translator had difficulty translating into Chinese:

1. "Building aggressively adequate level of locally-competent support to leverage high-cost executive resources."

2. "Understanding the 'interface' demands made on China-based executive resources."

These phrases, taken out of context, are baffling. What are the actions and goals that the writer is trying to convey to the PRC human resource staff? If not translated into Chinese, how would a range of L2 individuals work with these texts?

The same translator reported problems in translating "sexual orientation" in a survey, commenting, "There is no equivalent in Chinese and the questionnaire might just as well ask: Are you a gay or lesbian?" This translator experienced many of the problems outlined in Chapter Three within a few weeks of beginning work at a firm with the pseudonym, The American Auto Company (TAAC). A report from these early weeks contained this description:

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48 Here one must consider acronyms used as specialized vocabulary among technicians. "Laser" is an acronym (Light Amplification by Stimulated Emission of Radiation), for example, which can't be translated into Chinese. The Chinese had to develop a new word for "laser." This problem of translation of acronyms is not limited to character-based languages. In any language, the acronym can be imported wholesale and no longer functions as an acronym.

> Work at the *Da Za*[49] Place has been very crazy!!! I worked from 8:00 till 7:30 PM for the past three working days. PSE96—the automobile engineering exhibition to be held in Beijing this Monday—has put on so much stress on everyone. I can't tell you how disorganized the whole process is! All presentations by key departments and divisions at (TAAC) have to be submitted to the Ministry of Machinery Industry of the Chinese Government for approval, thus all slides, speaker notes, and documents have to be translated. However, it never occurred to people in charge that translation takes time, and it is critical to their success.
>
> What happened was three days before they got on the plane, they all suddenly realized that their documents had to have Chinese version. There you go, over a hundred pages to be done in a few days. (My supervisor) has called on many people to give extra hands, and he even sometimes lost track of which version was which because the documents had passed so many hands. Friday we caught so many errors, not only misspelled words (People do make a big fuss over misused words or phrases), but also mistranslated sentences, after everything already being faxed to Beijing Office. I was glad it was not my problem but I kept thinking (TAAC) would look better if these documents had been better managed, and the process had been better organized and coordinated. It could save everyone some sweat and the company some money.[50]

Informal translation, like that done by individuals as part of a larger task, can take less time than formal translation. A factor in this time element may be that the translations are less complete or accurate, and details are lost or permuted.[51] Many trained translators have an advantage over non-translators in vocabulary and language facility, and in understanding the cultural context in which the communication takes place or is expected to take place. Good translators can localize the communication to the needs of the readers because of their cultural understanding. English L1s can contribute to localization through working to increase their cultural understanding of the target country.

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49 *Da Za* is the Chinese equivalent of the U.S. concept of sweat shop, and means "Do nothing" or "meaningless activity" rather a direct translation of sweating over mindless work as in the U.S. idiom, an idiom originating in the factories on New York's Lower East Side in the 1890's, when immigrants worked long hours in unhealthy conditions.

50 Because of the sensitive nature of the work, the informant, a PRC translator working for an U.S. auto firm, remains anonymous in this dissertation. The report was received in June, 1996, by electronic mail.

51 Some English acronyms or expressions, such as "OK" are not translated into Chinese but are imported wholesale because no equivalent exists in Chinese (Bao-Tong Gu, "A Human Activity Approach to Software Localization," Master of Arts, Iowa State U, 1994, 84). This non-parallelism is prosaically obvious in Chinese movie subtitles, in which a row of Chinese characters is interrupted by a parenthetical "OK" in English—no character equivalent has been attempted to match the "OK" clearly voiced by the movie actor.

Cultural Understanding

The cultural understanding section of the IWCA is most affected by the organization's needs for localization, internationalization, or globalization. That is, specific features vary depending on the countries with which the organization is in contact. Because culture is hard to define and changes constantly, the cultural understanding section of the IWCA requires more review relative to an individual organization's needs than do either of the sections related to message pragmatics and to translation and readability sections. Part of creating the cultural understanding questions of the IWCA, or of selecting appropriate questions from a data bank of possible questions, requires understanding the international strategy and communication needs of the organization.

Determining if a U.S. English L1 writer is demonstrating cultural understanding can only be done by people with a deep understanding of the cultures involved. Bilinguals, especially those who work in an industry like that of the organization being audited, are invaluable to the further development and implementation of the IWCA. Two recent examples of poor cultural understanding noted by a PRC bilingual come from a U.S. auto company (TAAC). In one example, the script in a TAAC internal training video referred to car washing as an example of machine maintenance. This is a poor example for the PRC, for while car washing is a common form of low technology maintenance in the U.S., fewer than one percent of the PRC population has a car or washes cars. A better example would be bicycle maintenance, because the vast majority of PRC Chinese do clean, oil, and take good care of their bicycles. In a second example, TAAC promotional materials to sell cars and vans in the PRC did not realistically address the population. A van flyer read "(Product Name) sells for JUST 440,000 yuan!! Come on, and Rush in! . . .the vehicle is ideal for business and family pleasures. . . ." However, 440,000 yuan (approximately $50,000) is not a JUST, and few individual PRC Chinese can afford such a car for "family pleasures." The vehicles are sitting in dealers' parking lots. Vans are popular vehicles for *Dan Wei*—the work units—yet TAAC missed the sales opportunity through poor cultural understanding.

Advertising strategies, naturally, can be extremely difficult to globalize. In these two cases, more intensive localization (Hoft refers to serious localization efforts as "radical" localization) would be a better strategy than globalization (TACC seems guilty of "ethnocentric" localization here). The first example—the training script—is an example of an internal communication, while the second example—the flyer for the expensive van—is an externally directed communication. In both cases, an analysis of economic factors (yearly family income) and transportation (most common methods) could have prevented the extreme mismatch of

cultural expectations. These examples indicate questions that might be organized in the similarities and difference matrix to develop localization information.

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